OARDWATC' MAGAZINE

Guide to Electronic Bulletin Boards and The Internet

GOMT - USE PROCO QMODEM, OR TELIX To Telnet Across

TELECONFUSIO Bottom 5 Bullet

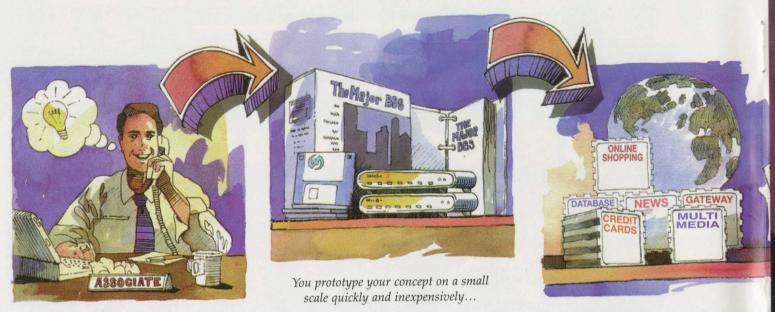
NANDO-NET NORTH CAROLINA BB

With Internet The Way it Should Be





You are the cybervisionary.



You start with a brilliant idea...

You smoothly integrate multi-user applications as you need them...

You have a vision. Bring your company online. Tie the workgroups to the customers. Distribute all kinds of information and electronic media. Or maybe launch a new business in cyberspace.

You need more than just a BBS — you want an open platform for creating your own online service. A system that is tailored to your mission. And nobody can do it better than you.

Start Right the First Time

The Major BBS® Version 6.2 gives you everything you need to get started: e-mail, forums, polls, file libraries, QWK, teleconference, a user registry, and more. Right away, you can plug in one or two modems in a DOS-based 386 or better and go online.

Customize your look and feel with the built-in Menu Tree[™] and text block editor. Use Locks and Keys[™] security for intuitive access control. Create unlimited user classes for accounting and system management.

Enjoy auto-generated RIP graphics, MHS importing/exporting, full multilingual support, time analysis and user reports, CD-ROM utilities, remote Sysop management, "doors" to an auxiliary

machine, an activity audit trail, autocleanup and timed events — hundreds of special features designed to make your life as Sysop a success.

But that's just the beginning...

Expand Your Horizons

Next, you can integrate a wide array of add-on options. Installation is as easy as "A:INSTALL". The Major BBS takes full advantage of DLL technology to dynamically link these features into your system.

For instance, Fax/Online lets you provide outgoing fax-mail and fax database services to your users. Search and Retrieve gives you a full document database, with support for graphics files and fax attachments. And Internet mail and newsgroups can pipe right in with the Major Gateway/Internet package.

Other DLL extensions available from Galacticomm include *Shopping Mall, The Major Database, Entertainment Collection, Dial-Out,* and a special version of the *RIPaint GUI* design tool.

Use the Menu Tree designer to place these new options in the most convenient location. Full security control lets you decide which users will have access. And because these DLLs are written in C and Assembly, they provide far greater performance and flexibility than script languages or xBASE derivatives.

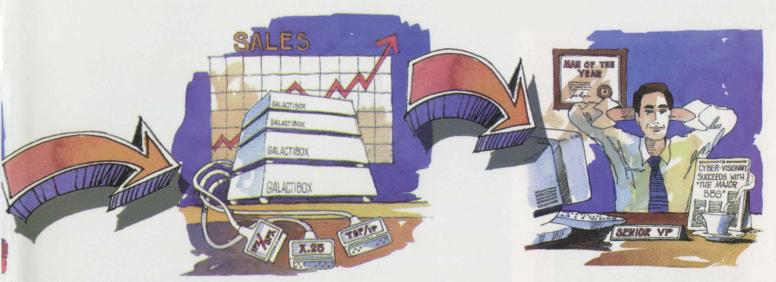
You Need It? You Got It...

Over 150 independent software vendors offer a wealth of products you can cleanly add to your system as DLLs. Plug in software such as:

- multimedia document servers
- MLS photograph databases
- · credit card verifiers
- FIDO, QWK, RIME mail support
- · online bidding networks
- employment classifieds
- 1-900 payment and tracking
- interactive multiplayer games
- · worldwide "chat" networks
- automatic call-back verifiers
- contact management databases
- alternate user languages
- photograph dating services
- online purchasing systems
- · satellite news delivery
- remote management tools
- and much, much more...

Each of these products integrates directly into your system, taking full advantage of our open architecture and

We just provide the tools.



As you grow, you add more lines, hook up your LAN, connect to the Internet...

And you experience the success of your own, unique online service.

multi-user environment. No other BBS platform gives you this power.

"Doors" even let you interface to client/server databases and other DOS applications, as well as the programs written for multinode BBSes.

With the Freedom to Grow

As your system takes off, you can add more lines without the headaches of multitaskers or stacks of computers. Simply add *User Six-Pack* licenses and hook up more modems.

ONLY THE MAJOR BBS GIVES YOU THE POWER TO SUPPORT OVER 100 SIMULTANEOUS HIGH-SPEED USERS ON ONE PENTIUM-CLASS MACHINE.

In performance tests reported by *Boardwatch Magazine*, The Major BBS handled 104 simultaneous file transfers at 14.4 modem rates (1750 cps), and over 64 at 28.8 modem speeds (3300 cps). In most real world cases, even more simultaneous users are possible.

You can use multiport hardware such as the GalactiBoard and GalactiBox to easily manage huge numbers of internal and external modems. (Galacticomm is the only BBS manufacturer with multi-

user hardware design experience.) The Major BBS also works smoothly with non-intelligent hardware by vendors such as DigiBoard and Boca Research.

And Connectivity For All

Only The Major BBS gives you the ability to support modems, serial connections, IPX/SPX LAN channels, direct X.25 circuits, and TCP/IP sessions — all on one computer. Each channel group can have different menu branches and security controls, at your option.

The *Advanced LAN Option* lets you create a bank of channels that will dynamically accept calls from computers around your office — directly through your Novell LAN.

You can also provide national and international access at low cost via the *X.25 Software Option* and a PC XNet card — you avoid the inefficiencies and expense of a PAD.

And our new *Internet Connectivity Option* lets you integrate a TCP/IP stack directly into your BBS. You don't need a separate machine to provide telnet in, telnet out, FTP client, and FTP server features to your users. Anonymous FTP and Internet surcharges are also supported.

A Bright Future Awaits You

There are few limits to what you can accomplish with The Major BBS. The full C source code to the BBS is available, to give you the ultimate flexibility. Write your own add-on options, or tweak a particular function to your exact needs.

And to address the needs of very high-end applications, Galacticomm has launched a UNIX technology division to provide The Major BBS platform for minicomputers to supercomputers.

Integrated solutions, consulting, and custom development are available from *Ambassador* dealers worldwide. World-class support is available to you via voice, fax, BBS, CompuServe, and the Internet. A quarterly magazine called *The Major News* provides you tips and tricks, as well as a resource for third-party products and services. And regular software improvements bring you the latest in online technology.

For more information, give us a call at 1-800-328-1128 (or 305-583-5990 outside the U.S. and Canada). And let's turn your visions into reality.



October 1994

BOARDWATCH



DVORAK
ONLINE
The Future of
Computing
Page 156



ONE BBSCON 1994 You Had To Be There Page 42



TELECONFUSION Bottom 5 Bulletin Boards Page 118



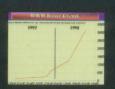
NANDO-NET NORTH CAROLINA BBS With Internet The Way It Should Be Page 127

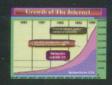
FABLE OF CONTENTS

EDITOR'S NOTES	8
MAC BBS and The Taco Bell Canon In D	8
DVORAK ONLINE	156
The Future of Computing	
IN MY HUMBLE OPINON - LETTERS TO THE EDITO	R 10
TELEBITS	23
LINUX - Journal Magazine Encylopedia of Graphic Formats A Cut of the Long Distance Pie	23
Time Domain - Satellite Network Online Payments by Personal Checks	242526
Paint Shop Pro 2.0 ONE BBSCON - You Had to be There	35
PEOPLE ONLINE	
PEOPLE ONLINE - Barbie Cotillion	The state of the state of the state of
INTERNETICA	
The RBOCs are comming net.imperative - Hackers in Vegas COMT - Qmodem or Procomm over TCP/IP NETBOY - An Internet Cartoon Webcrawler - WWW by E-mail Internet Stats for First Half of 1994 Suicide Counseling by E-mail	69 70
MACINTOSH BBS NEWS	90
Vendor Roundup	90
EDUCATION LINK	86
KIDLINK - Global Dialog	86
TECHNOLOGY FRONT	50
Seeking the Ultimate Graphics Machine	50
Access To Government	82
"Justice (?)" - Clinton Style	82

Boardwatch Magazine (Issn:1054-2760) is published monthly at an annual subscription rate of \$36. (\$99 Overseas) by Boardwatch Magazine, 8500 W. Bowles Ave., Suite 210, Littleton, CO. 80123. Second Class postage paid at Littleton, CO and at additional mailing offices. POSTMASTER: Send address changes to: Boardwatch Magazine, 8500 West Bowles Ave. Suite 210, Littleton, CO 80123 Printed in USA.







ISSN: 1054-2760 Volume VIII, Issue 9 October 1994

Internet - Now 3.2 Million and Growing Page 70

THE BIG BOARDS	104
Delphi	
America Online	
GEnie	
Prodigy	114
LEGALLY ONLINE	96
A Tap on Every Phone - The Dream of Every FBI Agen	nt96
Telepoperation	440
TELECONFUSION	118
Bottom 5 Bulletin Boards	118
GADGETS & GIZMOLOGY	49
GADGETS & GIZWOEGGT	45
Xircom Pocket Ethernet II	49
DIRECT DIAL	121
506 Product Support Systems	121
NandO Land Bulletin Board System	127
Elbow Lake - A Connected Community	
PCs in Ohio	130
LIST DIRECTORY	
Modern Watch	
Internet UUCP Hosts	78
List of List Keepers	
The BIG List	134
The National List	
Advertisers List	152

Editor/Publisher

Jack Rickard

Assistant Editor

Brian Gallagher

Contributing Writers

John C. Dvorak Jim Warren Jim Thompson Lance Rose Bill Gram-Reefer Walt Howe Wendy Murdock Ric Manning Charles Moore Phyllis Phlegar Dave Tennant Lenny Bailes Gordon Cook Rea Redd

Art Director/Cover Design

Charlie Moore

Graphic Design and Production

Jeff Rouyer Marla Asheim

Subscriptions/Circulation

Rob King Cathy Youngblood

Technical Operations

Gary Funk Richard Moreaux

Newsstand Circulation

Martin L. Shafkowitz

Advertising Sales

Roger Mertes Charlie Moore

Editorial Offices

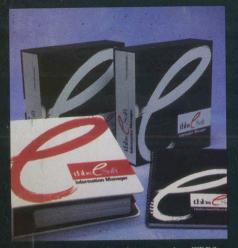
8500 W. Bowles Ave., Suite 210 Littleton, CO 80123 (303)973-6038 Editorial (303)973-3731 Fax (303)973-4222 BBS (800)933-6038 Subscriptions

Electronic Mail

Internet: jack.rickard@boardwatch.com subscriptions@boardwatch.com

FidoNet: 1:104/555

Copyright 1994 Jack Rickard All Rights Reserved



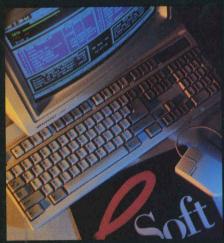
- ▲ In addition to complete documentation, TBBS comes with a 40 minute installation video tape.
- Number of simultaneous, full-speed ZMODEM downloads at 38.4 kbps on a single P5/60 CPU.







- ▲ The test was conducted in the eSoft Testing Lab. Each PC represents one BBS user.
- ◀ A 64-line TBBS and Internet Protocol Adapter (IPAD). Minimum hardware – maximum power.



- ▲ The high reliability of TBBS means its power won't turn on you. No babysitting required.
- ► TBBS' unprecedented flexibility lets your BBS talk to your callers in their language.



Power.

When your BBS succeeds, you'll need the power

to back it up – and you won't want to buy a

room full of computers to get it. For years, TBBS

has stood alone at the top of the power curve in

BBS software. It still does. To prove it, we put all types of BBS software in a room and tested them. As the graph on the left

shows, the closest competitor can't deliver half the speed and power of TBBS 2.3. To complement its speed and power,

TBBS delivers unprecedented flexibility and

smooth expandability – on the minimum

hardware possible. So scaling up as your

system grows won't stress either your

Speed.

budget or your sanity. And TBBS is backed by eSoft – the company with the most computer communications knowledge and expertise in the industry. You can buy 64 user TBBS 2.3 for \$1,995 (32 user for \$1,495, 16 user for \$895, and 4 user

TBBS.

for \$295). When you're ready for the only BBS product that can truly deliver reliable online xBASE databasing, TCP/IP Internet access,

LAN access and

high speed modem support in an integrated system, then you're ready to step up to

TBBS. Call (303) 699-6565 for more information and access to a demonstration system.



15200 E. Girard Ave. Suite 3000 Aurora, CO 80014

EDITOR'S NOTES

MACBBS AND THE TACO BELL CANON IN D

The most mind altering substance in the universe cannot be grown in field or laboratory. It is an idea gleaned from the mind of another human being. If it is a sufficiently powerful mind, a sufficiently powerful idea, and you can rise above your own ego long enough to listen and try to comprehend what they're saying through all the filters and shields through which we throw things at each other, you can enjoy the pleasures of enormous internal wreckage and debris. You do have to be able to allow a certain amount of rearrangement of your mental furniture. But you get to watch the world change before you.

Through a fortuitous series of chance meetings and scheduled liasons leading up to and including the ONE BBSCON in Atlanta, mine did with regards to bulletin boards, online services, and the common backplane that ultimately binds them - the Internet.

THE LIMITS AND THE "INEVITABLE" SHAKEOUT

Two concepts I have always been uncomfortable with, but accepted as givens are under serious attack.

The first had to do with the limits of the caller universe for online services. How many people are there that potentially want and need to call a BBS or online service? This little belief system goes something like this:

- People who use online services share certain definable characteristics that draw them to use online services.
- 2. The subset of the population that shares these necessary characteristics is definable, and something seriously less than the total population.
- The probability is that the main characteristic is they are all a little geeky over computers anyway.
- **4.** And at some near point in time, the current explosive growth will drive us to reach the limits of the universe.

The big question here has been where are we CURRENTLY as opposed to the ceiling, and how quickly are we approaching it.

The second little belief system has to do with the online services themselves.

1. How many of them can there be before there are too many.

2. As a function of the first belief system, as we approach of the limit of the caller universe, how will that figure change.

The heart of this is a view of online services and bulletin boards as an infant industry analogous to the rather tired description of automobile manufacturing.

In the formative stage of the automotive industry, there were hundreds if not thousands of car manufactories. As it matured, the "shakeout" occured and we were left with three or four big ones. Many industries do follow this development curve, and in fact many do so in "similar" information fields such as radio, television, and newspaper publishing. A few giant conglomerates tend to hold all of it.

The big question here then was when will the shakeout occur, and what will be left in its aftermath.

OK. Now, picture this - what if all of these were the wrong questions?

EVERY MAN A PROGRAMMER

A very late night after dinner discussion with Phil Becker and a gentleman who will, in the interests of intrigue remain nameless, but who's initials are J.P. McMillan, centered around why virtually every aspect of online communications was not getting simpler.

The barriers to new callers in getting online are simply too high. The number of things you have to learn to get online and do productive work seems to be increasing. This generalized bitch session covered why modem initialization strings are getting WORSE and not easier to deal with. Why are we still getting MORE file transfer protocols to choose from. What does the COMM.DRV for Windows have to do with the price of milk in Nairobi, and what ARE the magic words you must have in your WIN.INI to get comm stuff to work at all. Now we are adding WINSOCK.DLL to the equation, TCP/IP, SLIP accounts, Mosaic and World Wide Web, and more.

Between the three of us, we had wholly observed over the past 15 or so years that starting with an admittedly techie set of improbable and poorly designed tools to deal with online communications and a few thousand people at best, this online community has grown to 15 to 17 million people and an enormously larger set of improbable and poorly designed tools to deal with online communications.

This is counterintuitive. As time and technology developed, and as less technoid people came online, things should have

gotten SIMPLER. Instead, they were getting MORE COMPLEX.

Why would this be? Inescapably, it must be because the community, both singularly and together, demanded that it be so.

This is observable in the software development process. Every software developer that faces any success at all receives an incredible number of requests from the software users/purchasers to add just this "one more little function" in the next release. Can you make it work backwards? Can you cause it to do the same thing sideways? Can I pick the colors? Can we do it faster, but retain the ability to do it slower at the same time? The number of "feature requests" can be almost overpowering. Featuritus is endemic in software development.

So why do they want all that? It is an empowerment function. It is so they can do more things. And with each thing they find they CAN do, it brings into view a new horizon of more things they could do if they could just get it a little changed. In fact, it may be that virtually everyone who has a computer is constantly creating new combinations of software to move documents through a series of programs, for example, to do a certain thing. View entire software programs as huge macros. And the feature requests ONLY surface when the users are close enough to see some new combination they want, but can't get there without some changes in a particular software program "component."

Computers are NOT like television. Whoever sits down at the keyboard instantly becomes the director. They get to struggle with and master their own little universe of beige plastic and phosphor. In this sense, every individual is at heart a programmer. They may not aspire to assembly language, but they want to pick up some tools and rearrange the universe before them. Picture them as the "executive director" programmer, and the software development company as a "gruntling" programmer.

The feedback loop on personal computers is entirely closed. Instant gratification. Who wants to use computers out of the total population? Perhaps EVERYONE. A significant number of people haven't discovered it yet, but there is a very real possibility that all humanoids exist in a never ending quest for bigger sticks with which to whack their universe into a bit different order. If so, the "ceiling" on who will ultimately want to go online doesn't exist. The speed with which we approach it becomes a function of the ability to convey the word - but the saturation point approaches population.

BOB METCALFE, SYLVESTER STALONE, AND OF COURSE TACO BELL

Bob Metcalfe is an interesting man. Many years ago he helped develop ALOHA net, a scheme for throwing packets of data up into the air via radio over Hawaii and hoping some of it landed on one of the islands where you could catch handfuls and hopefully make some sense of it. It was a kind of radio data network that used a couple of frequencies to "network" some sites together. He later evolved some of the concepts into ETHERNET, founded 3COMM Corporation, and \$400 million later got out of it. Today he is editor and publisher of Infoworld, which he describes as the only way they would let him have his own column.

One of the ways he is interesting is that he claims to know nothing about bulletin boards and to have never logged onto one. He probably actually did run what was a BBS in the late 1960s about ten years before Ward Christensen, but essentially is unfamiliar with the genre as we know it. An outside pair of eyes, but with an extraordinary perception about technological and industry issues. We invited him to come to ONE BBSCON, see whatever he liked, and on Saturday afternoon, do a little talk on what we looked like to the outside world.

His presentation was indeed entertaining. But more usefully, it WAS a view from the outside, with the expected surprises.

He pointed out that there was not a single BBS software developer among what was termed "the big four" that had more than about 40 employees. And at the same time, any one of them, in summing the callers to all the installed base of bulletin boards running that software, would dwarf Prodigy or CompuServe several times over - a huge but thorougly diffuse community. His suggestion was for franchising of bulletin boards to centralize or aggregate some of that energy to gain some control or economic growth.

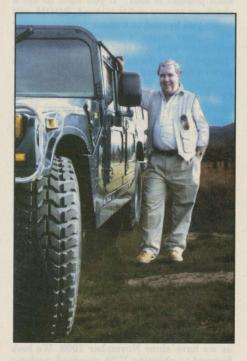
The franchise concept is an interesting idea, just not terribly interesting to me personally at the moment. But the analogy he used was of course the classic in franchising, fast food restaurants - he termed the BBS version "MacBBS."

For some reason, I instantly recalled a recent Sylvester Stallone movie, so bad that the title mercifully escapes me, wherein Sylvester, a cop, and his arch enemy, a criminal, are cryogenically frozen and of course later thawed out in a future devoid of cops and criminals. While they battle, the movie did include one cute bit on Taco Bell. It seems in the future, ALL restaurants are Taco Bells. And the explanation was that Taco Bell emerged from the restaurant shakeout as the only restaurant. Everybody then ate out at Taco Bell. There

was no alternative. You could eat at home, or go eat at Taco Bell.

It was clearly done for comic relief, and the idea of their being a "shakeout" in the restaurant business is ridiculous enough that it worked. There are hundreds of thousands of restaurants all over the country. MacDonalds really IS a HUGE franchise, grossing more than most countries, and there are dozens of VERY big franchises as well - Kentucky Fried Chicken, Taco Bell, Burger King, Pizza Hut, - franchises of every variety.

In the same world, there are some VERY successful restuarants that couldn't possibly BE chains, it wouldn't work. The very best in most cities tend to be posh custom restuarants that are very upscale and very trendy - not at all chains. In precisely this same world, until his recent death, Daddy Bruce ran a barbecue joint in Denver - an almost falling down wooden shed where you could get a barbecue pork sandwich for about a buck - and no one really questioned that it was the best around.



There are hundreds of thousands of restaurants across the U.S. and around the world. HUGE chains that could buy states if they wanted, and tiny barbecue sheds, and everything in between. It is a VERY competitive business. But it remains one of the most diverse businesses there is and one where the entrepreneur can still make a go of it. An extraordinary number of Asian refugees absorbed by the U.S. in the late seventies created a huge number of successful Asian restuarants and actually changed the American diet forever starting from nothing financially in most cases. And the concept of it boiling down to a single Taco Bell chain is just not feasible.

If anything, people want variety in restuarants.

Could it be that this is the more likely model for online services? Networks, huge commercial online services, single line hobby systems, and every flavor and range in between in perpetuity? No "shakeout" beyond the ordinary and ongoing market directive that

the stupid shall die?

(Lacking some governmental intervention of course, where it chooses to cherish and protect stupid.)

SCALABILITY OF INTERNET SERVICES

And finally, the Internet. Nobody knows what it is, but everybody wants to sell it. Regional telephone companies, long distance carriers, cable tv operators, Internet service providers, BBS operators, and probably Walmart before it's over. Never has so little been so misunderstood by so many, and so much money changed hands while they tried to work it all out.

Technically, it is just complex enough that it does take a lot of hand holding to bring it to the masses. And everyone who tries to deal in it winds up with incredible growth curves and ultimately buried systems with insufficient numbers of trained people to even keep the equipment running properly, much less provide the necessary customer support. It's like trying to serve hamburgers every evening at six - state wide, and to a population that at the same time desperately wants hamburgers, and doesn't know how to operate them.

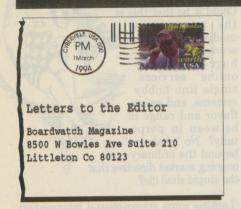
Thus far, all internet service providers do quite well with less than a hundred lines servicing a thousand people or so. Virtually none of them do well at a larger size. And it kind of makes sense. When was the last time you went out for a nice quiet dinner at a 1000 seat restuarant? If you're looking for an opportunity, there are about 10-12 million EXISTING callers waiting to be seated.

The picture that emerges is of man as a tool builder busily creating the largest, most complex and powerful tool ever devised by the mind of man. So vast, no one single mind ever held the top level drawing on the project. And for me, the "lid" just blew off the top of where it can go.

This business, if nothing else, will keep you forever Young...

Jack Rickard Editor Rotundus Boardwatch Magazine

IN MY HUMBLE OPINION



Address correspondence to Letters to the Editor, Boardwatch Magazine, 8500 West Bowles Ave., Suite 210, Littleton, CO 80123; by fax to (303)973-3731 or by e-mail to letters@boardwatch.com.

Dear Mr. Rickard:

Your comments about Zoom and V.FC modems in July 1994 Boardwatch were false, unfair, and shocking in their careless disregard for truth.

You state that "Hayes rather blasted the entire modem business when they not only announced, but started shipping, a V.FC modem last fall"..."Unfortunately, more than a few (modem companies) opted for a third strategy. ANNOUNCE a V.FC modem and pray that they could play a delaying game until V.34 was real and never have to ship any, or at least not many, that would have to be updated later."

This is false in several ways. First of all, Zoom fully supported V.FC technology as a good way to get advanced modem performance. We began shipping 19.2 and 24 Kbps internal modems in high volume in November 1993, about the same time as Hayes began shipping V.FC, and began shipping 28.8 Kbps internal modems in high volume in January 1994. We expected to begin shipping our external V.FC modems at the same time, but were significantly delayed due to problems getting FCC 15B approval. (The digital signal processor in V.FC modems is very fast, and it's a challenge to control RF emissions. Rockwell changed the DSP at least three times in the first 8 months of production, hoping to reduce RF problems. This is the real story behind Zoom's delays, and probably others'.) We began shipping 19.2, 24, and 28.8 Kbps external V.FC modems in high volume to the BBS community and to others in April 1994, and it took us a while to catch up on backorders. Zoom has shipped over 50,000 V.FC modems to date, including 3500 under our BBS program, and we have a large number of happy customers. We continue to ship V.FC modems in high volume, and remain excited about the high performance per dollar available from V.FC technology.

You state that "V.FC leveled every existing modem offering in its path almost immedi-

ately." I can't imagine what you mean by that. Zoom's V.32bis modems, faxmodems, and voice faxmodems continued to sell in very high volume after V.FC introduction, and they are still very strong. U.S. Robotics and others were late in shipping modems that supported V.FC, but they still generated very high revenues with V.32bis. What are you trying to say?

You state that "Zoom actually took orders AND money for V.FC modems at ONE BBSCON last fall, and I STILL haven't heard of ANYONE actually receiving one of these modems." (The capitalized words are yours.) Do you live in a cave? Have you ever logged onto a Zoom forum or onto Zoom's BBS? We DID ship V.FC modems in high volume starting in November 1993, as discussed above. We did NOT take money at ONE BBSCON. Our policy was stated on our order form, which I quote: "Payment must be received before product is shipped. Payment may be made with check, money order, Mastercard, Visa, or American Express. Credit cards will not be charged until product is sent. If you want to use a check or money order instead, ZOOM will notify you to send in a check or money order when your order is ready." Credit card customers were told that their card would be charged 1-2 weeks before shipping, and this policy was followed.

Due to delays in Zoom's anticipated shipping dates, particularly for the external V.FC modems favored over internals by most BBS operators, electronic mail messages explaining the delays were circulated on the FidoNet HSModem Conference, the ILink BBS/Sysops Conference, various UseNet Newsgroups concerning BBS/Sysops, Compuserve, and the Zoom Tech Support BBS. Once initial shipping dates for the externals were confirmed, electronic mail messages were sent to these same conferences.

You state: "But they haven't been alone. At least half dozen modem companies have announced V.FC modems months ago, and never shipped a one." I won't comment on other companies, but I want to say again: Zoom Supports V.FC and the BBS community, and we continue to ship high volumes as we have since November 1993. We look forward to shipping V.34 standard modems in the fall, and feel there's still a place for V.FC modems, particularly considering Zoom's attractive pricing and upgrade program (\$49 upgrade to V.34 for participants in Zoom's BBS promotion, for upgrades through 1994, Contact Zoom for details.)

Zoom's Sysop program has been an ongoing project with tremendous response. Listings of current BBS's on the program can be found on the Zoom Tech Support BBS (617-423-3733) under "Bulletin 9".

Zoom Telephonics is a strong public company that does its best to provide great products at a great price. We sometimes make mistakes and sometimes have unanticipated delays, and we apologize for this. But we absolutely did not behave as you have stated, and we would appreciate your running this letter and a public apology in Boardwatch. And in the future if you want to know something about Zoom, please give me a call or send me a message through Internet. I'll be glad to help.

Sincerely,

Frank Manning President.

Dear Mr. Manning:

Yeah, and I hate it when that happens too Frank.

I will indeed print your letter in Boardwatch, and in fact, I think you're probably right, a public apology is due. Unfortunately, it isn't as much a public apology TO Zoom Telephonics as much as it is a public apology FOR Zoom Telephonics. We did indeed sleep on this one too long - basically hoping for the best and hoping you would get well. This seems to be the year of calling Jack to complain about Zoom.

Your entire letter consists of a series of blatant statements, followed by the usual weasle worded qualifiers and backpeddling most commonly the purvue of a guy in a plaid coat selling watches out of his trunk. Zoom did not ship any V.FC external modems in high quantity in November, and certainly none to sysops. The external model was promised and since it was the only one assured to be upgradeable to V.34, the only one of significant interest. You did take money at ONE BBSCON in August of 1993. or at least our people thought they gave you money, to order a 24 kbps modem at a very attractive price with delivery promised in October actually. If you didn't actually charge the cards until shipping, then you did at least just barely comply with Federal Trade Commission rules on the topic. The last of nearly a hundred complaints we heard was received during the last week in May. Not only were modems not shipped, but the operators we've heard from report numerous attempts to call Zoom, apparently something of a feat in itself, to receive the basic runaround about when their modems were shipping, with evasions and misdirection being the order of the day. At ONE BBSCON '94, I was STILL hearing about it and so were your own people.

I happen to know you DID ship a number of modems late in the first quarter, and did so WITHOUT bothering to fill the orders from BBS operators you had received SIX MONTHS earlier in August. It would appear you delayed shipping those until after you shipped to large retail chain customers you considered "more valuable." I can imagine the pressure was considerable as we noted any number of discounters and major stores actively advertising modems they simply

didn't have - because they hadn't recieved them from you.

The concept of a low-dollar V.FC modem, even in the 24 kbps version, was very attractive in August of 1993. It cannot be lost on you that it was considerably less so in April or May of 1994. We had several BBS operators create heirs in less than the 9 months it took you to send them the modem they thought they had purchased in good faith the previous August.

As to my comment regarding V.FC leveling everything in its path, read carefully or take a remedial course. I doubt V.FC had any impact on V.32bis sales whatsoever, and won't substantially for some time. But there were several other schemes vying for the high-speed nod - most notably AT&T's V.32terbo, killed on contact and causing a number of modem companies not as firmly onboard the V.FC ship as Zoom was, quite a bit of reassessment at minimum, embarrassment most likely, and very well may have killed a couple of smaller ones who simply picked wrong - we'll see. AT&T, incidentally, seems to be very early and very strong coming out the gate with a new V.34 chipset, September shipments in quantity from what I understand, and we wish them well - and for early V.34 modems. The \$79 chipset price augurs well for high speed - low cost modems and plenty of them at attractive prices.

And we do indeed both publicly and sincerely apologize to any readers or convention attendees who were misled to any degree large or small, by our complicity in noting your very public announcements of modem availability and the attractive price. Our enthusiasm for new technology does make us an easy target for "optimistic" manufacturers with a good line. In this case we probably crossed the line between early and timely news, and simply touting vaporware. We will be more prudent in the future, certainly with regards to Zoom Telephonics. As to my calling you, I can personally confirm that Zoom Telephonics is simply not available by voice telephone.

So there is your letter, and my public apology to all our readers for your poor behavior. That completed, if your real mission when not trying to piss down MY pant's leg is to provide great communications products at a great price, we're with you buddy. And God speed...

Jack Rickard

Jack:

As you surely don't know, it is my custom to read BW whilst ensconced upon "The Throne." My Reader's Digest subscription expired.

This custom is good for the alimentary canal. A few hearty guffaws from the letters section and your outrageous comments about the online industry have a salutory evacuative effect.

But only Charlie Moore's "Teleconfusion" raises tsunamis in the oubliette! Write this guy into your will, Jack. Some-

body's got to carry on BW when you log out for the last time, and even Dvorak doesn't come as close to your wit as Mr. C. does.

David Hakala

David:

Most pleased to learn Mr. Moore's Teleconfusion is raising the tide level in the blue bowl at the Hakala house. He's actually our resident A.G. (Art Guy) and like many things at BW, it started as a joke when some PR geekette at Rockwell decided we were the wrong mag to look at their NetHopper, and what we really should have is a NetHopper hat. I don't review hats, so we gave it to Charlie and he did. One of the real marketing guys at Rockwell called later to say they had over 2700 inquiries about the hat.

We still haven't seen a NetHopper, but Teleconfusion stuck. An Art Guy at heart, the big guy wants to do cartoons in this issue, and what the hell, if we can do recipes, we can give cartoons a shot too.

But despite that, there are some things we just won't bend to. And no matter how many requests we get, I am NOT going to produce a squeezably softer, nor more absorbent Boardwatch Magazine. Use a catalog like everybody else.

Jack Rickard

Dear Mr. Rickard:

I'm a bit annoyed at Jim Warrren's insipid column. "Access to Government" as a THEME is okay. What we need now is precise information as to where that "Digital Telephony" act *IS* in the Congress.

Is it sponsored? Who sponsored it? What committee in what house?

I have no access to the Internet at prices I'd care to pay. Papermail will do fine to exert political FORCE. Is it really so important that State "X" has a computer interface or should we be concerned that State "X" is mooting legislation to remove digital text from the "Bellopoly"?

What comes first? Tiinkertoy or political maneuvering?

Mr Warren gives me the impression that he abhors the use of POLITICAL FORCE as something unclean. In civics we learn that legislators want us to be happy-don't-worry but adults learn they're wind-sensitive whores bending to perceived FORCE. Think of politics as a monster tree; if you don't push in the direction you want it it's going to fall on you; there happen to be many groups pushing this monster tree in various directions, one of which being your happy home.

Mr Warren should get a copy of "The American Rifleman" and pattern his column after their methods. The NRA couldn't care a fig about "Computer access", per se, but rather with LEGISLATION and the application of POLITICAL FORCE. The NRA, unlike Mr

Warren, is exactly where it should be: protecting a minority interest.

Please see what you may do to get Mr Warren away from his "tinkertoy, oh boy!" approach into something more power oriented — something resembling what the NRA does but for computer purposes.

Was it Lenin who said that any revolution that can't defend itself is worthless (or words to that effect)? 'Sounds like something he'd say.

Arne C. Eastman PO Box 651 Auburn, ME 04212-0651

Arne:

I would say Jim Warren is probably personally responsible for more LEGISLATION on this topic than any of the legislators, which makes me a little puzzled by your diatribe. He caused several fax storms in San Jose that directly led to California legislation putting state documents online and is currently engaged in driving for campaign disclosure online and in electronic form to gain visibility into the varied moneyed interests affecting legislation. Your characterization of "tinkertoy, oh boy!" just doesn't match my admittedly unqualified, but nonetheless strongly held view of Jim Warren.

A revolution that can't defend itself is worthless? Words to live by there I guess, but a little beyond my grasp apparently.

With regards to Digital Telephony, this bill is in its third incarnation that I'm aware of. The spooks in Washington DC just won't let it die until they get what they want - the power, ability, and right to listen to what you say when speaking to other Americans. These people BELIEVE they should have this as their own right as bureacrats. It's a strange world. This proposal has died twice in Congress, and to hear them tell it, we'll all be knifed in our beds if they can't listen to our telephone conversations. Killing it again will simply cause it to come up again next year I do assure you. The only way I can see to drive a silver stake through the heart of this nasty little beast is to amend our Constitution to specifically deal with the privacy rights of our citizens - a daunting thing to attempt. It actually is left a little open right

The actual bill now coughs \$500 million of your tax dollars to common carriers (telcos) to install technology and equipment to assure the ability of the dark forces to mind your own business. BBSs and online services don't appear to be affected directly for the moment. I'm sure that will come after the money is doled out.

The current bills are SB 2375 in the Senate and HR4922 in the House. The last I heard it was in the House Judiciary Committee Jack Brooks of Texas is chairman - (202)225-6565 voice or 1584 fax. One group that has kind of caught my eye with their very informative mailing list is the Voters Telecom Watch, a volunteer organization dedicated to

STOP losing time and money setting up and maintaining your online Information System. We have a team of professional system designers and programmers available to get your application online quickly and inexpensively. GW Associates has over eight years of experience helping customers with a wide range of online needs and the combined experience of over 30 professionals is available to help you bring your vision to reality.

We work with many excellent programmers. Tom Faulkner, President of BBS Consultants, Inc. has years of experience in custom programming and has done a considerable amount of work for federal government agencies. Based in North Carolina, Tom has installed and supported systems located all over the East Coast.

508-429-6227 VOC 800-492-8227 FAX 508-429-8385 BBS **GW** Associates Information System Specialists P.O. BOX 6606 One Regency Drive Pete White Holliston, MA 01746

Toby Schneiter is located in the Chicago area and has been responsible for many corporate installations in the Midwest. John Schachat is based in California and has installed commercial systems nationwide and has written some of the top enhancement software packages for TBBS/TDBS. Randy Harris has been working with graphic interfaces for years and creates

excellent graphic based commercial systems.

2-Line BBS

For \$39.95?

Call for info!

Unsure of who can best help you with your needs? Call GW Associates and we'll help you determine who can best handle your applications. Our ONLY business is installing commercial systems and we work full time to satisfy the needs of our customers.

In order to best appreciate the capabilities of the software we work with you can get a full demonstration by calling our customer support system via your modem at (508) 429-8385 and registering as a GW Associates customer. This will give you full access to our system and to over 150 enhancement software packages, our catalogs and many demonstration software you may download and run on your TBBS/TDBS system.

Complete 16 line system (shown above). Call GW or one of our associates for a quote on software, hardware, custom programming or a

complete "plug n' play" package!

(ATTENDED)

East Coast Tom Faulkner BBS Consultants, Inc. 919-683-2078 VOC 919-383-4905 BBS

Midwest Toby Schneiter AlphaOne 708-827-3615 VOC 708-298-7155 BBS

West Coast John Schachat Silicone Central 408-267-7176 VOC 408-267-8734 BBS

HEBUSINESS BBS Custom Online Application Solutions

Announcing MultiBase Online™

A PROGRAMMABLE, MULTI-USER CLIENT/SERVER RELATIONAL DATABASE FOR ONLINE SYSTEMS

MultiBase Online is a proven relational database engine offering the flexibility and versatility usually associated only with LANs or desktops.

The MultiBase Online advantages:

• FULLY PROGRAMMABLE: An xBase compatible programming engine. Most DB3+, DB4, FoxBase, Clipper summer '87 as well as many FoxPro, Clipper 5 programs can be recompiled and run.*

FOR PRODUCT DATA CALL 310-575-5077

*Desktop or LAN databases might require some re-programming for efficient online operation. MultiBase and MultiBase Online are trademarks of Cykic Software, Inc. RIPscrip is a trademark of TelGrafix Communications, Inc.

- CLIENT/SERVER: A MultiBase Online server allows up to 32 simultaneous users, without impacting base system performance. Link MultiBase servers as needed, without duplicating data.
- VERSATILE: Allows a RIPscrip™ Graphical User Interface. Associate a wide range of objects, including photographic images, line art, and fax files, with each database record.
- **DEVELOPMENT TOOLS:** Database programming tools, including a 4GL code generator, are available.

Online demonstrations are available by appointment. Telephone today for more information.

Voice (310) 477-0593

Fax (310) 477-9475

2531 Sawtelle Blvd., Suite 109, Los Angeles, CA 90064-3163

monitoring federal legislation affecting telecommunications and civil liberties. They keep scorecards, provide legislative contact information, and have a mailing list that's actually pretty good. Contact vtw@vtw.org or join their mailing list with e-mail to vtw-list-request@vtw.org.

. . .

Jack Rickard

Hi Jack-

Ok, the trouble with Bob Houston's idea is that it doesn't go far enuf. Why should the user of Netcash have to keep track of his credits manually (by the way, credits ARE what he getting for his 900 call). Tracking this data can easily be done with a bit of software at the user's end. And if you wouldn't want your 'credits' just lying around on yur hard drive, these petty cash files should probably reside on removable media (floppy or "floppy-like" device such as a PCMCIA card), which you could keep with you, hide or whatever. You'd "pocket" it just like you "pocket" your wallet (or purse).

It seems clear that NetBank as described, easily identifies ou cause it must assign a unique "account#" to track your balance, transactions, etal. None of the transaction codes OR your account number need EVER be known to the user. It \MIGHT be necessary to add a password (PIN number?) to the system for added security. In effect the removable media (above) would work substantially like a prepaid credit card (ie. debit card).

The rest, while hardly trivial, seems relatively obvious.

My best,

Brooke W. Boering Vagabondo Enterprises 718 Encino Drive Aptos, CA 95003

ps. My interest in this stems from the fact that I, too am implementing an "autonomous information processing system" (AIPS?). With all the recent hype about the wide, wide info highway, little attention is being paid to phenominal growth ot these "little info servers". They provide short (usually under 1 minute) pieces of time or mission sensitive data on demand. Examples are credit/debit card verification, stock quotes, racetrack handicap data, etc. They need VERY little bandwidth and provide VERY high value. I can even imagine them running on telegraph, semaphore or smoke signal systems just as effectively (albeit, a bit slower).

Brooke:

Yes, it is a bit obvious. I guess I'm charmed that he has a server up and working and you can use it now. As noted, it may have a few problems. It will undoubtedly serve as a target for those who devise anti-schemes to see if it can be done. Almost ALL proposals we've received since January on this topic either get mired down in wishful thinking that we could do AWAY with money

. . .

entirely, get mired down in some little mythical hardware gizmo, or become so convoluted in security that no one would ever WANT a quarter that bad. The NetCash system was on the bare edge of permissible complexity, and probably not very secure. But it is interesting.

. . .

Jack Rickard

Dear Jack:

Your June editorial will raise some eyebrows, I am sure, but I am passing it on to folks I think need to open their minds to the possibilities of what the future may hold. I share your concern for the parental gov't's interference in our lives. In a way, Dvorak's column in this issue fits with your editorial. Individual Liberty can only exist in a society that holds individual responsibility to be a virtue. Today those of us who so hold are often treated as rather amusing throwbacks to the stone age. I personally am opposed to any regulation of an adult's personal behavior as long as it does not interfere with or threaten the life, liberty or property of another; that includes getting rid of drug laws and the terrible cost that enforcement has caused, as well as so called porn laws. But at the same time I am opposed to the taxpayer taking care of morons that end up in the gutter because they make stupid choices and make themselves unemployable.

Once upon a time, normal people in this nation were capable of rationally exercising their compassion for the less fortunate. The churches, and most private charities, handled the problem. They recognized the difference between folks who through no fault of their own were unable to function, and the libertine excesses of the spendthrifts and clowns who created their own misery. Today we have ceded to gov't our personal responsibilty for our fellow man and thereby dulled the natural compassion we once had. We have also created a society in which growing numbers consider themselves entitled to all the benefits of labor and industry, without being required to contribute anything but a gaping maw, yelling "Feed Me!"

Ayn Rand predicted the final outcome. It is arriving faster than even she would have believed.

And what does all the above have to do with your editorial comments? In my opinion, it all fits together. Law once was defined as the rational application of justice to a society with a common set of values. Today emotion rules the intellect, therefore law has degenerated to accepting the general consensus of what "feels" right.

The various states have adopted the Federal Rules of Civil procedure as the law in the state. Previous to this error they used the Common Law, inherited from England. Under the old procedure there were two forms of trial courts, courts of law and courts of equity. The Federal Rules of Procedure are based on equity and law has died as a result. A definition of "equity" in Gibbons on Chancery is "Equity is the

measure of the Chancellor's foot." A purely subjective approach.

So today we worship the subjective and have killed the objective; and therein lies the problem of the poor victim that is the subject of your editorial.

. . .

Best Regards,

Ray L. Walker Ray.Walker@Nashville.com

Dear Ray:

I agree on all fronts. Perhaps we are victims of our own successes. Character emerges from the fire of adversity overcome. If too little of our population really ever sees any, it is not so surprising that we devolve to a tribe of morons huddled around the tv. Oh, we all worry enough about where we'll find money to make the next car payment, so it seems problematic enough. We could lose our jobs and have a bit of stress while finding another. But I was staring into the garden hose just yesterday, totally perplexed by the wonder of where all the water came from, and was struck by my own wanton gluttony in spraying it all over THE GROUND so that my grass would have that nice even carpet-like feel - certainly one of the basics of life (there's probably a "right" in here somewhere - the inalienable right to a green lawn, or the right to clear water something). The water is crystal clear, even quite delicious to drink out here in the mountains and very healthful - and apparently available in unlimited quantity. It would be perfectly acceptable to use this liquid - far more precious than gold - to spray the road dirt off my car. No one would even comment on the grossly absurd waste of it. I can run it out on the ground and no one will care. And we're not talking about muddy water from a communal hole in the street, or brackish water running along the ground. It's piped to the house in crystal clear fashion. Nearly enough a miracle.

We do live in the strangest of times. Most of our problems, note, are us against us. Street crime makes victims at a time when our law enforcement apparatus is focused on delivering severe sentences for crimes that not only lack real victims, but actually take a great deal of technical explanation to describe. As a society we are down to inventing troubles just to give us something to talk about. The Clinton administration is terrified we will be able to TALK online without their approval and their ability to listen in - that we have a legitimate national security and law enforcement RIGHT to listen to private conversations between individuals living on the same continental land mass. Within just a couple of years, I'm going to have to write the story covering how they busted someone for encrypting email in violation of some future law that bans us from doing such a thing because it deprives them of listening in case we ARE doing something illegal. IT'S CRAZY. We are visiting pain upon each other for no reason other than we just have too many people with too little on their minds and badly in search of something to do.

Instead, let's organize a National Water Festival to celebrate the miracle in our garden hose.

Jack Rickard

Re. Harley Hahn and Wendy Murdock's col. on E-Text. I agree and disagree. I agree that I know no one that would want to read a book on one of todays desktop computers. (for all the reasons given.) However I have read a number of E-Text books (full length novels, science fiction etc.) on my HP100LX palmtop. Using a program called "Vertical Reader" so the text is oriented properly if you hold the palmtop so the screen is sideways, it makes for a very readable display. The palmtop is about the size of a paperback book when opened, and it's very easy to go from one page of text to the next. With the LCD display there is no 'flicker', and you can even read under the covers if you have a flashlight. I would think the Newton, Zoomer etc would all have these qualities.

Why this way and not just buy a book?

Toys are toys, and we like to play with them.

As a business traveler I already have my sched., notes etc. on my palmtop. It makes more sense for me to also load a few books into it to read in the airports while my planes delayed, than to buy a few books and have to cart them around and take up space.

So while I think that the reasons for reading E-Text as books are not overwhelming, I think there is a lot more potential for them than given in the column. And in the future, a "newton" or something like it could be the book of choice!

Thanks

Dan Kinsella

DKINSELLA@DELPHI.COM

Dan:

I like to read. I have since the nuns showed me how. I read before bed. I read in the throne room. I read in the dark. I've read cereal boxes, telephone books, and the little slips that come inside a new package of underware declaring that she did in fact say they said Haines when she said they said Haines. I've read some GREAT things in my life, and some really, really bad pieces of drivel. I read a lot off the page, and quite a bit off the computer screen.

I agree the screen can be made better through both technical design and aesthetic design. And I think it will improve over time, though perhaps more slowly than we would all like. But at this point, you'll not find me at odds with Mr. Hahn. In fact, I've been trying to locate an article I did five years ago with essentially the same message ever since receiving Harley's article. Reading can of course be accomplished via computer. But it is a different process. I'm not sure if it is entirely even the physical medium. If you could duplicate the page on a screen in its entirety, would it THEN be the same or different still?

For me it is mentally quite different I think even in how I process text from the screen in my mind. Physically, there just isn't that much text there. On a page, you can "glance" back 500 words in 1/10th of a second, glance over at the picture, catch the caption, go back to reading the line of text, and so on with such ease that you are not conscious of it being part of the reading process.

There is really no reason why the 8.5 X 11 aspect ratio of the printed page has over time become so common. But the computer screen has never even sought this as a goal. Technically it is trivial, and there have even been a few full page monitors produced - to no great hurrah. So I'm unclear whether we are even aiming in any serious way at making them the same.

Computers can search text, sort text, index text, examine text, archive text, and otherwise allow us to manipulate text with enormous power. But it is not lost on me that I'm selling a printed magazine specifically to people who daily dial services that hold more text online at any moment than any one of the callers could possibly read in a lifetime.

If you've read full length novels on a palmtop computer, I would guess you're in a tiny minority. Can it be done? Undoubtedly. Should it or will it be commonly done? Probably not in my lifetime.

The other element of all this I would point out is that there has not been a year since 1979 when someone did not make a plausible case describing how computers would eliminate the printed word. And there has not been a year in that time that the number of words printed on paper decreased. Strangely, the largest contribution computers have made in our society is to increase the volume and speed with which we can print words on paper. And so we do.

There are some fascinating developments going on right now with Ziff's Interchange, NCSA Mosaic pages, newspapers finally going online, etc. I guess I think it is all a little exciting and I do love eye candy. My call right now? Reference works will move almost entirely to computers. "Reading" for pleasure such as you and I now discuss it just won't - not in our lifetimes. I'm with Harley on this one.

Jack Rickard

Jack,

You say that the net is "awash" with all sorts of misuse, and therefore this justifies all new misuses - or at least that's the way you come across in your defense of C&S (the immigration lawyers.)

First of all, the net isn't "awash" with misuse - it is mainly used for productive, interesting, and fun things. But it is a very large net, with many millions of users (perhaps 30 million world-wide) and it wouldn't be surprising for there to be many dozens of misuses. Note that most of these misuses get dealt with quickly because of reaction of other network users and because

it is in the best interest of network operators to keep the net operating well.

So then we have these jack-ass attorneys who seem to feel that anything, no matter how destructive and/or annoying, is ok as long as there isn't an actual law against it. (What they did is exactly equivalent to finding a small town that hasn't passed an ordinance against dumping toxic waste near its water supply, and quickly dumping toxic waste there - and then using the letter of the law to defend the action.)

They posted to thousands of newsgroups an ad which was unrelated to the topic of the group. This wastes the time of the reader, and often costs the reader money - for many people pay for network time used and for disk storage.

Perhaps having many people (measured in the many tens of thousands) injured just slightly by C&S makes you admire C&S. If you really feel this way, I can only hope that you get into legal dealings with legal firms which are as detestable as C&S and that you are treated no better than the network users have been treated by C&S.

Best wishes,

henry schaffer HES@UNITY.NCSU.EDU

Dear Henry:

First, I did not at any time claim or imply that unvalued use of the network justified its continuance. I offered the commentary that the particular incident was widely held out as a unique or unusual event, by those who sounded terribly shocked and outraged, when in fact it was not only not unusual, but very common. Second, what net are YOU on? Clearly I need a connection. In weighing pound for pound, ton by ton, and phosphor bushel by phosphor bushel that which I observe on USENET, you can't possibly be referring to that one.

Thirdly, there are not 30 million readers of USENET. These wide ranging estimates vis a vis the Internet have entirely gotten out of hand. If you are going to throw figures of 30 million around, why not just use 700 million or 2 billion? They would be as accurate.

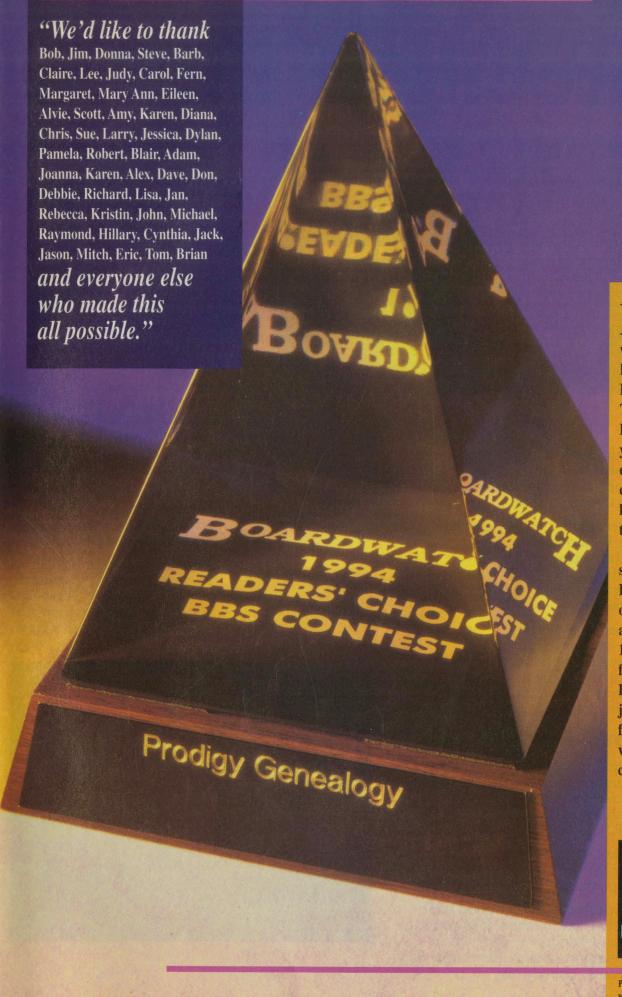
But I agree entirely with your main point that lack of law or regulation does not imply that all behavior is acceptable. I don't defend C&S in any way. In fact, if we could all learn a little common consideration, the apparently ever pressing need to pass yet another law might ease. We have too many already.

That said, I still have the same question. This was NOT a unique incident, so why is everyone up in arms? Or conversely, why are you all not outraged on the DAILY flow of such messages from other parties?

Jack Rickard

Dear Jack

Congratulations for having the courage to speak out in your last editorial, and finally



Prodigy would like to thank all the readers who voted our Genealogy Bulletin Board one of Boardwatch Magazine's Top Ten BBS's in their Boardwatch 100. It is your recognition of the quality of these on-line communications that keeps us striving to be the best.

If you haven't yet seen why PRODIGY's Bulletin Boards stand out from the pack, call us at 1-800-PRODIGY ext. 143. We'll give you 10 free hours on our Bulletin Boards just for joining. And we'll look forward to receiving your vote in next year's competition.



PRODIGY is a registered service mark and trademark of Prodigy Services Company

Searchlight BBS...



Our RIP file manager lets you scroll anywhere in a directory...you can tag items and run commands by clicking with the mouse

When the first Bulletin Board Systems went online in 1978, graphical user interfaces didn't exist. Callers had to stare at text menus and memorize commands; there was no alternative.

Today, everyone prefers the dazzling screens that Windows and OS/2 provide...but most BBS programs still display the same drab, confusing text menus that the first programs did.

The information superhighway is full of exciting stops; no one has to call your BBS anymore. If they see cryptic text menus, they won't call back. You have to give callers the dazzling graphics and intuitive menus they prefer. That's why you need Searchlight 4.0.

RIP: We Show—Not Tell

The Remote Imaging Protocol by TeleGrafix gives callers the graphics and mouse support they expect; that's why callers prefer RIP. That's why BBS developers are scrambling to add RIP—and telling everyone that their RIP is "as good as Searchlight."

Well, talk is cheap—and seeing is believing. It's easy to see who the leader in RIP support is...look at our competition and keep asking: "Where's the RIP?"

Other companies love to tell you how good their RIP support is. But they hate to show it to you in their ads, brochures and test drives. They won't show you their RIP support because they know they can't match ours. Because nobody can.

The working scroll bars in Searchlight 4.0 let you scroll through a message, file or directory list with your mouse. You can select messages, tag files, set options and run commands just by clicking with the mouse

Searchlight 4.0 creates RIP menus on the fly, so you can build custom menus in seconds. And Searchlight 4.0 is the only BBS program that displays RIP locally—so you see the same screens your callers do.

We do RIP better than anyone because we've been doing it longer than everyone. Searchlight 3.0 was the world's first RIP-compatible

BBS. Searchlight 3.5 was the first BBS that generated RIP graphics—the first to offer scroll bars, pick lists and "on the fly" menus.

Searchlight 4.0 is the only BBS that displays local RIP. It's the only way to give callers a true GUI with no proprietary terminal.

And 90 days after TeleGrafix releases the RIP 2.0 protocol, we'll introduce Searchlight 4.5—the first BBS program that supports it.

"Searchlight is doing a marvelous job incorporating RIP into their BBS"

Boardwatch Magazine

Boardwatch Magazine July, 1994



Our direct video support lets you run any text-based DOS program as a door

you won't believe your GUIs!

Improvise Without Scripts

If you want custom menus, some companies make you buy their script language and write routines in it. That's not customzing—it's programming.

We think our engineers—not our sysops—should write the code. Our menu editor lets you put any command (we have over 100) on any menu. You can nest menus 40 levels deep and add doors to any menu-even build executable menus that run lists of commands.

Then use our RIP styles editor to add buttons and wallpaper—we'll generate your menus on the fly. Or use your favorite RIP painting program to draw RIP screens...and let us put your menus on it.

If you want a custom BBS, we help you build it quickly and easily. When you buy Searchlight 4.0, you can leave the compiling to us.

Open Any Door

A hobby BBS might want to add external programs ("doors") so users can play online games. A business might need to let their users drop to DOS and run a custom application.

Some major BBS programs can't drop to DOS at all. Others make you fiddle around with a DOS shell utility.

Searchlight 4.0's built-in DOS shell lets you run any text-based program (like FoxPro, dBase, Paradox or applications created with Clipper and Clarion)



The automatic menu generation in Searchlight 4.0 lets you turn any RIP screen into a custom menu

> online. Just set a switch and forget it; we make running spreadsheets online as easy as 1-2-3.

No Fine Print

Callers love what Searchlight 4.0 can do. Sysops like what Searchlight Software won't do.

We don't make "Digiboard" or "network" versions—support for intelligent multiport cards and LAN software is free. We support Internet addresses; just add your favorite mail utility. Tech support is always free; if you want more lines, we credit all your purchase price toward your upgrade.

And we don't want to sell you a terminal, so we include RIPterm (TeleGrafix's free, RIPcompatible terminal) with each copy, so you can help your callers "get RIPped."

So call for your fully functional demo of Searchlight 4.0 now...and see why people say that we're not like all the other GUIs.

'Searchlight remains one of the easiest BBS packages to set up and use; it is also one of the least expensive" **PC** Magazine

June 14, 1994

Single line \$99 3 lines \$179 10 lines \$299 **Unlimited** \$399

Windows, OS/2, RIP, Paradox, FoxPro, dBase, Clipper, Clarion and Digiboard are trademarks of their respective companies.



800-988-LITE

Support: 216-631-9290

BBS: 216-631-9285

Fax: 216-631-9289

6516 Detroit Avenue Cleveland, Ohio 44102

put the sorry state of America into proper perspective.

It's a pity that there aren't more journalists like you to really speak the truth. Most of them cower behind the skirts of political correctness, the religous fanatics and other movements that have been responsible for so much of the moral degradation of your once great country.

I hope it doesn't have to come to the stage where you have to arm your family, or where a majority of Americans support the violent overthrow of your corrupt politicians and public bureaucrats.

Even in Hong Kong, we are starting to see the emergence of "democracy" with politicians of all parties willing to make outrageous promises of increasing government expenditure in an effort to buy their way into the local parliament. (With a very noticeable increase in their salaries and allowances in the last couple of years.) Any real destruction of the HK economy is going to come about from these people rather than from China.

I suspect you will find a much greater support for your views, especially among your ordinary US readers than you thought. (you know the type that used to want to be like John Wayne, had their own lemonaide stand when they were a kid, pledged allegience to the flag with a respect for the constitution and weren't afraid of taking a risk, because they knew they always had a chance at the big time.)

The BBS area is always going to be one area that can expose the corrupt areas of government and help to protect your constitution and to protect your way of life.

Simon Patkin

simon@hkatl.com

Simon:

Yes, I know the type. I still admire those guys. They don't get out much these days apparently.

Thanks for writing and good luck in Hong Kong. I understand you all will be going through some changes there.

Jack Rickard

Jack:

I am in the process of doing a business plan that would involve setting up a BBS and other things and just got off the phone with the bank that I have used for the past 20+years (yeah, I AM old!!) Just like you have said in your BBSing for Profit seminars, they were more than amenable to setting me up. No hassles at all. They even waived the 6-month period (trial period, I guess?) since I had been such a good customer [that in itself demonstrates the limits of computers... if THEY don't know how many times I've overdrawn, who does:)].

I applaud your move to putting a mailing cover on the magazine. Mine have started

coming to my door in increasingly worsening condition. Makes one think that the USPO has been reading the letters to the editor section. :)

BTW, I *enjoy* the letters to the editor section. Thanks....

LTC Michael W. Cannon USMA West Point, NY km5380@usma7.usma.edu

Michael:

I have had hundreds of sysops over the years absolutely adamant that they could not possibly get a merchant account with their bank. I've worked with a number of them, and never seen one fail to get it. Some banks are easier than others, but it is a significant part of what banks do, and they want to do it. It is really quite like applying for a loan, and realistically, they are indeed loaning you money - or at least exposing themselves to financial risk on your behalf. There are alternatives to banks for merchant accounts, just as there are alternatives to banks for banks for merchant accounts, and troublesome to deal with them than the bank.

As to the post office, I really don't know what's going on down there. I could tell you stories. We are having increasing difficulties both with damage and delivery. We are trying to "harden" Boardwatch against the postal attack with various glues and wrappers. We intend to win, but its a task.

Jack Rickard

Hello,

I just wanted to bring to your attention a BBS software package that seems to get very little recognition by BoardWatch, or any other BBS oriented media for that matter. This very impressive package is called Virtual BBS (VBBS) by Roland De Graaf. VBBS is a ShareWare Package that offers many of the same features that the "big boys" do, but at a much smaller price. VBBS's Powerful Network Engine is able to handle 999 different networks with ease; no need for a front door. Also, It supports a powerful script language that allows you to customize the package to look and feel anyway you want. I have been in the BBS business for a long time, and have used most of the major packages. I have to say that I am stuck on VBBS. Although this sounds like an advertisment for VBBS, it is not. I just get a little irritated as I pour though the pages of magazines and read reviews and raves about all those other packages when VBBS is as good and even BETTER than many of them. All I am saying is; Give VBBS its time in the spot light.

Also, I would like to say that Your magazine is a fantastic piece of work.

Keep it up!!

God Speed

Randy Miller, SysOp Corporate Ladder VBBS [1:2215/420] 216-677-1040 rmiller@corp.aldhfn.org

Randy:

We'll try to find out more about it. We're in a bit of a situation of "So many bulletin boards - So little time." But I've heard VBBS has gained quite a following and now has an OS/2 version. We'll try to take a peek in a future issue.

Jack Rickard

Dear Jack,

Quite a few people and myself, in London, have been enjoying your magazine and editorials for well over a year now.<glorious display of flattery<g>>

I have been running a BBS for support/info for my store for about the same amount of time, and have found quite a bit of information gleened from your magazine to be useful. We are one store in a chain of twenty <currently trying to get the other nineteen to catch up>.

I have a couple questions.

- 1. Where can I get ahold of 'Creating Successful Bulletin Board Systems' by Alan D. Bryant. Prentice Hall in Canada is one of our vendors, but they do not seem to have the capability to get it for me. We sell to quite a few bbs', most of which have expressed an interest in it.
- 2. Given the variety of cases going on about porn and related issues, we have seen our own little black horse here in London, Ontario. Over the space of about 10 years, there has been a large porn ring going on in our own little backyard. Basically, 20-30 male adults have been purchasing a variety or services from several hundred youths<aged 9-14>. Several hundred pornagraphic tapes and other materials were seized. Included in this was the system of a well known bbser. His system was called Grev Friars Bobby. Apparently this individual had been purchasing certain services from boys aged 9-12 since 1982, after inviting them over to play video games on his computer. Interestingly enough, this individual was not a person who you would think to be involved with such matter < being a long time member or the London and Area Sysops Association with high standing>, in that he does not fit the sterotype of a greasy pedophile. To say that we were completely floored by the 30 odd charges levied against him would be an understatement.

I guess the thing that this issue raises is: what is he guilty of? Now I know many people would scream bloody murder over this, and some of it is called for. Apparently, all the people involved were aware of their actions and all were involved during an extended period of time, producing pornos, with absolutely no duress. In the age when 4 year olds are murdering babies in England and when an 8 year child can quote you your arrest rights, what age should be considered

a cut-off point between 'obsessive pedophile' and 'prostitute purchaser'?

I in no way approve of these happenings, the same way I do not approve of the recent arrests of people producing pornographic material. What is considered lands for 'consenting adults', and what is considered lands for getting yourself sent to Sing-Sing for an extended vacation? Do you arrest the people who run the cameras and sign up the actors as well as the people involved with purchasing the movies < estimated to be in the 1000's of tapes sold>. On any given day, you can talk to one person who would like to string him and his friends up by their 'shorts' in front of the court house, and then talk to another who thinks that the consent was there for everything to be okay. Unfortuately, the sysop of Grey Friars Bobby has essentially taken a topic which would have passed by us like a freight train and thrown it, speeding at 65 miles an hour, into our laps. I do not like being under the scrutiny of anyone, but I feel that there shall soon be a couple extra callers, extraordinarily interested in my cd's and message bases. Carry porn cd's online ... are you kidding? That, given the current gravity of the situation would be insane. Likewise, I think you'd be hard pressed to find any on many bbs' in London.

As of Tuesday July 5, 1994, the witchhunt for bad boy bbs' has not begun. We involved with this aspect of cyberspace on London are braced for fire and brimstone that comes with ANY blackspot in computers. The police chief of London is begging for a couple million in funds for a task force the size of Elliot Ness' G-force at their peak and it appears he's going to get it from the Ontario government. I know of a couple of sysops who are sheepishly scanning their message bases almost daily to ensure that no 'undesirable' or 'risky' information could be passing through their modems. It's probable that they will root out other scourages here like pirate boards, etc, but what will the cost to others who are interested in the clean enjoyment from cyber-communications be?

<phew, what a ton of typing! Sorry for the
length>

I personally think that London has the highest per capita bbs population in the entire free world, so it should make for some interesting news. I'll keep you posted.

Chris Mcnutt
A Plus Software BBS
Internet: CHRIS.MCNUTT@APLUS.DT-CAN.COM
P.S. hope to be able to attend ONE BBSCON
and meet you.

Chris:

Alan Bryant's book, Creating Successful Bulletin Boards, is available from Addison Wesley. They are already discussing a THIRD printing so it seems to be doing pretty well.

Yes the issues are pretty thorny. I'm always in a difficult position here. I don't personally read anything racier than Smithsonian Magazine with regards to photographic images. I am neither experienced nor knowledgeable on sexual matters, and so it is only fitting that I should constantly be asked to comment on them? I cannot imagine anyone wanting sex with children, and no, I cannot fathom a situation where they can be "consenting." They can't even find their shoes. The concept is repugnant beyond horizon

And therein lies the problem. The accusation itself can destroy a person's life, and rather demonstrably can be made absent any evidence of wrongdoing. I rather believe such accusations are indeed commonly made without foundation, and find that an equally heinous act. The simple and immediate advice I would offer is don't traffic in erotica online. It seems to me rather pointless even if it were without consequence.

But it is quite possible for this situation to reach near hysteria, and from what you describe it may have in Ontario already. The unfortunate outcome is at best a dampening or chilling effect on online communications. And as likely the more serious matter of regulation of online services, which could be mild or could involve review panels for every bit and pixel and e-mail message in Cyber-Space. Unfortunately, the outcome is not decided by the majority of us, but rather by the worst of us. While I would personally prefer bulletin boards to focus on pictures of ducks, cars, and airplanes, I would not advocate that be the law of the land.

Jack Rickard

Dear Jack,

Along with probably 99 and 44/100th's of the online community my hat is off to you. Your exceptional magazine is pure reading enjoyment and the ONLY one (out of 12 or so that I get regularly) that takes me DAYS to read. It seems every letter, article, ad and review has something valuable to tell me. I've recently started reading it with a yellow highlighter in hand so I can mark and easily follow up on things of particular interest.

With that said, I wanted to mention a new Prodigy program that might be the kind of thing Georg Kochi was looking for when he wrote asking about a newspaper-type output from the online news services in the July, 1994 Letters section of Boardwatch..

Prodigy's candidate ("The Journalist") is a program that resides on your hard disk (available for downloading for a one-time fee of \$49.95, I believe) and works in conjunction with Prodigy for Windows.

While it doesn't let you "view" a newspapertype format interactively while online, it DOES allow you to design your own, personalized newspaper by specifying which/what/where of the many Prodigy features you'd like to see on a regular basis, where in the "newspaper" you'd like to see them, how you'd like them layed out (typefaces, headlines, positioning, borders, fonts are all user-definable) and can include photos, weather maps, charts and graphs, stock quotes, investment company news and recurring columns, among many, many others.

Once you've defined just what it is you want to see and how you want to see it, the program will either manually (or with a "scheduler" set for a specific time(s)) dial up Prodigy, run around and get all the stuff you want, log off, "fill" your newspaper with the appropriate information, and print a beautiful 8.5 x 11" custom report. In addition, you have the ability to view the newspaper on your screen prior to or instead of printing it out each time.

The customization of this pretty nifty tool is virtually unlimited; you can make it look like a newspaper, a newsletter, an interoffice memo, or any other custom format you feel would be useful to you or your organization.

Don't know if this is the kind of thing Georg was looking for, but thought you might be interested in knowing about it anyway.

I hadn't yet heard of Ziffnet's pending Interchange service, so once again thanks for the tip!

Regards, John Cinelli chcc89a@prodigy.com

John:

It sounds fascinating. The concept of a "custom" newspaper for every reader is not new, but continues to have some merit. A big part of dealing with information in the future will have more to do with what is screened out, than what is included. Filters against the hurricane of information. Prodigy is making some significant strides in multimedia news - sound clips now and photos with news stories, and I think they'll work into video clips accompanying text stories when the bandwidth is sufficient. In fact, this is the first real application of multimedia that has made the buzzword real for me personally. If you combine text stories with photos with videos, you almost develop a catalog of tv that becomes searchable and browseable and when you find a story that really interests you, then you can watch the "video." It holds a lot of possibilities and they've taken pride in their news arm all

I personally think the way to success for Prodigy is on their BBS discussion groups, and some of their new offline mail programs. But there is a subset of the online community that has to have their daily news fix.

Jack Rickard

Jack,

In your reply to a fellow about the health-care "crisis" I finally saw someone speak to what I've said along about Insurance.

Market to the cal time

You said "What's an Insurance Company? And why do you allow them?"

I want to take it one step further. If everyone in the US stopped paying them and went to the doctor and paid them their fee outright,

what would happen to the price of health care?

Susan Easter susan.easter@psl-online.com

Susan:

I was first keyed to this in 1983 with the birth of my first offspring - a girl child. In comparing notes with my father, we found that the out of pocket cost of the delivery was approximately the same for me as it was for her. Of course, I was only paying 20% of the cost and the insurance company was paying the other 80%, whereas he was on the hook for the whole amount. In those days, you went to the doctor, he sent you a bill, you paid it - sometimes as best you could over a few months, but that was the drill. The conversation really revolved around inflation, but it started a rather haunting thought process. What if 80% of the costs of medical care were in the insurance itself.

So for a number of years I've puzzled over just what it might cost for medical care if there were no insurance companies. I've never figured it out empirically, but I've run into some enraging concepts along the way. Not just over medical insurance, but over insurance as a whole. Without relating a hundred or so incidents, let me relate just a couple. I went to Hugh M. Woods, a hardware store, to by a 20 amp electrical receptacle for a battery backup system. By code, 20 amp circuits are supposed to have a little bit different socket than 15 amp circuits. However widely ignored this may be, the electrical connection on the battery backup unit had a 20 amp plug, and while I did have 20 amp service in the wall, I needed a 20 amp receptacle. They had two. One was orange, and one was white, both made by the same company and otherwise appeared to be of identical construction, weight, and quality. Oh, there was one other difference. The white one was \$2.39 and the orange one was \$16.80. So I asked one of the clerks what the difference was. He told me the orange one was "hospital rated." I asked him what the difference was between hospital rated ones and non-hospital rated was and he noted that they were of the same quality and construction, and he wasn't sure just what the difference was - probably better quality control or inspection procedures or whatever.

I bought the white one. But curiosity is a terrible thing. So I called the company that manufactured the receptacles. I probably talked to ten people there before encountering a humanoid but he told a pretty interesting tale. Apparently, if you manufacture anything to sell to the medical industry, the exposure to lawsuit is tremendous. So the product liability insurance is just incredibly high. Since they don't specialize in medical equipment, they produce the "hospital rated" model and apply the entire cost of the increased product liability insurance to those units, rather than spreading them across their entire product line. This keeps them competitive on the white models, while still allowing them to sell to the medical field and be covered by insurance. The actual difference between the two units is the addition of orange die to color the hospital rated model.

Now let's look at the doctor's liability insurance. Here in Colorado, as of two years ago, the average liability insurance fee for Doctors specializing in Obstetrics/Gynecology was \$108,000 per year. That's \$9000 monthly or about \$300 per day. I don't know how many babies an OB/GYN averages per day, but I would think 3 or 4 would be a hard day, and with office visits and other duties they probably average less than 2 per day across the year - even busy ones. So nearly \$150 of the Doctor's fee, not a large part of the total delivery bill, has to be just for liability insurance.

I was also employed by a large Aerospace company which had excellent health and dental benefits. The week before I left them to start doing Boardwatch full time, one of my kids went to the dentist. The bill was \$125 and the dentist submitted a claim for the amount. While I no longer worked there, the office visit occurred while I did, and I'm sure we could have worked it out eventually, but I was really wanting to be through with them. So I asked my wife to go down to the dentist's office and just write them a check. She did. She explained to them that we were no longer covered and she was here to pay the bill herself. The receptionist, in a very routine and offhand manner told her that if it wasn't covered by insurance, and they didn't have to fool with the claim any further, they would be more than happy to accept \$45 for the visit instead of the originally billed \$125. That dentist is apparently convinced that about 63% of their costs is in dealing with insurance companies.

So I developed an interest in insurance companies themselves. What are they functionally? I found out that the largest venture capital investors in the world are ALL insurance companies. They are the largest institutional investors in the New York Stock Exchange, in mutual funds, in commodities markets, and even in currency trading. Anywhere money is invested, the big boy on the block always turns out to be an insurance company. They are more involved in the movement of capital than the banking system itself. They employ hundreds of thousands of people and are, after the government, the largest purchaser of computers and computer services in the

When you add up a 500-600% markup for every physical item that exists within the walls of a hospital or doctor's office - right down to the electrical sockets in the walls, SOLELY to cover product liability insurance, the liability insurance costs of those within the profession, and the apparently huge costs of dealing with the insurance bureacracy by every administrative office throughout the medical care system, I think the question of what percentage of our medical costs are CAUSED by insurance companies becomes a legitimate one. The picture emerges of a monster that exists to feed itself. They "insure" us from the costs of medical care, while at the same time feeding the costs. And the only conclusion I can come to is that it is entirely possible that the real costs of medical care ARE in fact the 20% most of us actually pay, and the entire remaining 80%

that they "cover" goes out one door and in the other.

It is entirely possible that if we made it illegal to insure medical expenses, instituted tort reform to eliminate medical liability lawsuits, and publicly funded schools for medical doctors and nurses to increase the numbers in that profession, medical costs would be barely higher than the deductable + 20% co-payment most of us have to pay already.

Oh, it's just a theory...

Jack Rickard

Dear Jack,

I was recently asked by someone what a BBS was "worth". In particular my BBS. Well, I had never given it much thought, and found myself at a loss to accurately answer the question.

I don't charge for BBS access. I have put a lot of time into creating the board over the past few years. It is still developing and I consider it to be in its primal stage.

But after all those hours, software registrations, phone bills, breakdowns, etc., It's got to be worth something(!), right?

Has the BBS community come up with an accounting formula for estimating the monetary value of a BBS? The way things are going, systems will probably be bought and sold in the future, what criteria would be used to establish the dollar value of a BBS?

Interested in your opinion and look forward to *every* issue of BoardWatch!

Secretary and the

Regards,

Jesus Dacal Jesus.Dacal@Sunshine.Com

Dear Jesus:

In order to accurately establish a value, there has to be an active market of things bought and sold. Very few bulletin boards or online services have been bought, sold or traded, so what you're wanting largely doesn't exist. It does seem to be picking up here recently. In looking at them as more general businesses, the "margin" in bulletin boards is also quite variable. How do you like 3.5 times gross annual revenues? Or seven times earnings?

Jack

Dear Jack,

First of all let me say that I love your magazine and it has proved to be a great resource in many of our business decisions. Now I'll cut to the chase...

I'm writing this letter as a warning to anyone thinking of running a UNIX BBS. I would like to tell you about my experience with a company known as Coconut Inc., the authors of Coconet. In September of 1992, we purchased a copy of Coconet with the

implication that we would be getting a free upgrade to version 4.0 by the end of the month. Come the end of September, version 4.0 was not ready. We had promised our users a new version with all sorts of new features, just as we had been promised. Well, time went on and we kept being told version 4.0 would be ready in a couple weeks. We received a post card in the mail stating that Coconet 4.0, along with the Cocotalk 2.0 Library would be released on August 16, 1993. We patiently awaited that day and when it arrived, still no Coconet 4.0.

Our BBS had become a joke and all of our users thought we were liars. When the August 16th date fell through we were told that we would be receiving Coconet 4.0 in a couple of weeks. We waited a few more months and finally decided that—after many conversations with the president of Coconut who seemed to show little to no remorse about these shamefull business actions—it was time to switch software. We had lost tons of business not to mention the money spent on Coconet which we were unable to get refunded. To my knowledge, Coconet v4.0 has still not been released and Coconet v3.3 remains a bug filled inflexible piece of software. If you are considering buying Coconet, I would recommend that you look elsewhere.

Now we are proud owners of the Major BBS and have experienced excellence in technical support. When we were having difficulties getting our PageSat satellite to work with Major, Galacticomm assigned a developer to remedy our problem. He did an excellent job and helped us get our new BBS up and running in a matter of weeks. That's the kind of reliability that makes us glad we spent the money to switch.

Dan Ginsburg System Operator Integrity Online dang@integtel.com

Dan:

It's a developing industry, and an interesting one. We first wrote about Coconet and their graphical interface in 1988. It was pretty hot. Unfortunately, it didn't advance much beyond that point, and the world did. There is an odd mixture of personality, risk, common sense, technical merit, and luck that go into running a kitchen-table startup up into a successful company. Some make it. Most don't.

As a service operator, I know it's no fun for you to pick wrong and wear the stripes. But you're part of the industry as well. The winnowing and sifting of the good from the bad comes from use. I know it would be nice if I would just publish a list of the winners and losers and save you all a lot of trouble. The problem is, I've seen losers become winners, winners go bad, kids with compilers come in suddenly and change it all, and a continuous flow of innovation and adaptation that leaves that simple option a little lame. No doubt there will be those who produce little charts purporting to do that for you. I don't know anyone in the industry better qualified, experienced, and capable of doing so than myself. I'll tell you now it won't happen, because it would be misleading, inaccurate, and dishonest. And that's if I do it. So I'll pass.

Good luck with your new platform.

Jack Rickard

Dear Jack,

I enjoy your magazine and have been a subscriber for several months, and naturally have some ideas for improvement. As an engineer, I read a wide variety of technical articles and magazines. I find Boardwatch sometimes difficult to read because of the jargon that has grown up around bulletin boards, the Internet and networking in general. Without knowing for sure, I would say that your mag is intended primarily for the system operator and for experts in the network field. If anyone else wants to read it, that's fine too. Well, lots of us who don't fit into the expert category want to know what's happening in this field too, and turn to your magazine for this knowledge. After all, were just "moroons" when it comes to this stuff, we just want to learn!

I have some concrete suggestions that would help me as I struggle through the new language of this complex but fascinating subject. I imagine they would help others as well.

- 1. When I see an article that I might be interested in, usually all I have to go by is its title. If you would put a short summary at the front of each article, telling what the article is about, who is its intended audience (e.g., sysops, general punlic, etc.), and what the author wants me to learn from reading the article, it would be most helpful in sorting through the various articles. This cold easily be done in an unstructured way in teh first paragraph of the article.
- 2. Don't assume that everyone is familiar with the jargon you guys use. We are not. When you use something not generally known, explain it every-so-often for the beginner.
- 3. Provide regular articles for the beginner. Call them beginner's articles on (whatever). This way the beginner could be brought along at an easy pace instead of struggling with every sentenceof every article. It can still be an interesting magazine to produce, because of the excitement of helping create future experts. The Beginners Corner, in the last issue, wasn't for beginners at all, but for new sysops.
- 4. I want to know what bulletin boards I can reach from my local area code without paying a toll. The listing you give in each issue is sorted by name of bulletin board. All I care about is the area code, not the name. Give me a sorting by area code, at least every few months. Who cares about the names of bulletin boards anyhow?

I believe you have a very good magazine. I know it is already highly respected. I just would like to be able to read it more easily

and be able to easily use the tabulated information you have gone to such great lengths to prepare.

Sincerely,

Joe Guinn 5101 Stacey Ave Fort Worth TX 76132

Joe:

It's a problem. Part of our game is to pack a lot of stuff into a relative handful of pages. We could fill the magazine reiteritively with explanations of acronyms, terms, and information for beginners, and I'm sure it would be popular given that there are probably 10,000 people making the connection for the first time every day now. But it's just not the publication I want to do. It's a little self-centered, but we talk about what I found interesting this month.

That said, I think we can probably afford something of a glossary at this point. The number of new terms and jargon items entering this scene is actually accelerating to the point where none of us can keep it all straight anymore. I would say you could look for something along those lines in the next issue or so.

Jack Rickard

Jack Rickard

I have been reviewing some of the old issues of BW and was struck by the "wisdom" of your past editorials. You do have vision and insight. And except for your blanket criticism of public education, I find your views and advice to be wise.

I look forward to seeing, maybe meeting, you at ONE BBSCON. Looks like our BBS, YEBB is going to be one of the "TOP 100".

Ray Christensen YEBB (Youth Education BBS) RAY.CHRISTENSEN@YEBB.AUGIE.EDU

Ray:

Thanks for writing. Vision and insight - except for where we disagree? I love it.

Attempting to collect and distill so many activities of so many individuals across such a panoply of change and an industry this volatile, and present it in some useful and clarifying way, lensing it if you will, is indeed a day's work. But without it, we're basically printing product announcements. We've missed on occasion, but yeah, if you go back over the last seven years of Boardwatch, it's a little scary. Keep reading.

Good luck with Youth Education BBS.

Jack Rickard



MUSTANG SOFTWARE

Could Introduce The Industry's

FIRST.





You know what you need: a multi-user system with LAN connectivity as well as dial-in access, robust database management, E-mail gateways, fax-on-demand services, and a programmable RIP graphical user interface. And here it is: the Wildcat! BBS Suite™ from Mustang Software.

Think of the control and convenience at your fingertips. Think of the time and money you'll save. Think how productive your company will be when you implement the most powerful BBS package in the industry.

For only \$999, you get everything you need to move your corporate environment into a new world of online communications with Wildcatl, The World's Most Popular BBS Software™. The BBS Suite includes our top-of-the-line Wildcat! MultiLine Platinum BBS, wcPRO Utilities package, wcGATE Internet/MHS mail gateway, and wcCODE Custom Online Development Engine. All in one easy-to-use integrated package. And only an industry leader like Mustang Software could bring it to you.

The wcPRO Utilities provide you with flexible user, message and file database power. You can create custom reports with more than 20 pages of online statistics, develop command line macros for nightly batch processing, and export BBS data into other formats for your other applications. Our relational database handling makes managing your BBS callers, files and messages quick and easy. The wcPRO Utilities package also includes our fax-on-demand processor, wcFAX, so your customers or other outside sales people can request data online and receive product literature, forms and other documents via their fax.

A sophisticated messaging gateway, wcGATE, enables your callers to send and receive Internet E-Mail and news right from your BBS without having to know a single Internet command. Built-in support for satellite connections means your staff can have a constant flow of Internet information at their fingertips. wcGATE also allows you to transfer BBS messages to your company's favorite MHS compatible E-Mail package. Outside salespeople and remote offices can leave messages on the BBS and have them directed to the appropriate mail box on your LAN using Novell's Message Handling Service (MHS).

wcCODE allows you to develop custom applications to enhance or change Wildcatt's operation. BASIC-like syntax combined with an Integrated

Development Environment makes it easy to use the more than 200 built-in functions, including access to Wildcat!'s internal operations. You can create applications like on-line order systems or callback verifiers, or customize Wildcat!'s user interface to give you the ultimate corporate bulletin board system.

And the list of advanced BBS features goes on. Your users will also enjoy wcCHAT, our new online conferencing chat system, which features public and private channels, Sysop-definable action words, even moderated conferencing.

Wildcat! supports CD-ROM technology via our utility wcFILE, so you can add files to your BBS quickly and easily. You'll appreciate wcMAIL, our .QWK mail door for off-line messaging, that now imports and retrieves messages faster than ever with message sizes up

to 64KB in length. For customer response polls, tap into the power of MAKEQUES, a full-featured questionnaire editor to create online surveys with yes/no, multiple choice, free form and formatted input fields.

Everything you need to set up and control a complete BBS environment is available in one solution. Everything in our suite is written and supported by Mustang Software. And at \$999, The BBS Suite saves you hundreds of dollars over buying each package separately.

If you've been considering setting up a corporate or business BBS for live, interactive communications, this is the *only* way to go. Give us a call today. We'll save you a lot of time and money. And give you the ultimate BBS tool: The BBS Suite.

Connecting The World In '94

Mustang Software, Inc. • 6200 Lake Ming Road • Bakersfield, CA 93306
805-873-2500 • FAX 805-873-2599 • BBS 805-873-2400

TELEBITS

LINUX JOURNAL MAGAZINE

Linux is a free implementation of an tessentially UNIX operating system most popular on the personal computer platform. Linux is not precisely public domain software. In fact it isn't precisely UNIX. Distributed under the GNU Public License, the source code to Linux is freely available. Many people around the world have worked together to write it, under the direction of the original author, Linus Torvalds. Each holds copyright to the code they wrote. So it's kind of a UNIX implementation designed by committee online.

In a world of \$1500 UNIX operating systems for the PC, the free nature of this operating system, and the open and experimental architecture have drawn a following. The operating system includes TCP/IP, news, e-mail, and is inherently easy to use with the Internet.

With a May rollout of issue number 1, Specialized Systems Consultants Inc of Seattle began publication of the LINUX JOURNAL - THE MONTHLY MAGA-ZINE OF THE LINUX COMMUNITY. This monthly publication covers the operating system itself, and the wealth of add-ons, application programs, etc. available for it. In the September issue, we learned about James MacLean's DOSEMU DOS emulator for Linux, the EMACS editor, a report on a Linux conference held in Heidelberg, and a story about the Roger Maris Cancer Center which uses Linux. The 48 page publication carries advertising for associated products, all of very low cost. The full operating system with utilities and a grab bag of goodies can be bought from at least three distributors on CD-ROM for as little as \$29.95.

The book is published monthly at \$19 per year. Linux Journal, Specialized Systems Consultants, Inc., PO Box 85867, Seattle, WA 98145; (206)527-3385 voice; (206)527-2806 fax; Internet: subs@ssc.com.

ENCYCLOPEDIA OF GRAPHICS FILE FORMATS

Our favorite book publisher on technical topics is a company called

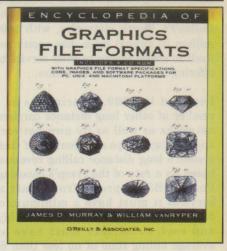
O'Reilly and Associates Inc. These guys are a hoot with their covers with animal art on them, but they do some very solid books and intentionally seem to pick off the most gruesomely technical topics they can find. We raved over their SENDMAIL book. And they've done it again.

The whole online community is struggling to deal with graphical interfaces, graphic file formats, readers, viewers, etc. O'Reilley just published the Encyclopedia of Graphics File Formats, written by James D. Murray and William vanRyper, one of the largest books they've ever published at 928 pages, that covers over 100 different graphics file formats such as GIF, TIFF, TGA, and BMP but also newer or specialized formats, like SGI YAODL, Rayshade, and Facesaver. If you are a graphics programmer who needs to know the details of a format (whether it's big or little-endian, how many colors can be stored, and precisely what data appears in each bit or pixel) or anyone else who needs to deal with the lowlevel technical details of graphics files, this book is for you. It is for programmers on any platform- MS-DOS, Windows, OS/2, UNIX, the Macintosh, and others.

In addition to describing the details of the file formats, the Encyclopedia of Graphics File Formats contains a detailed discussion of graphics concepts and programming, covering such topics as types of graphics data (vector, bitmap, metafile, scene description, animation, multimedia), truecolor, palettes, and color—its perception, conversion, and quantization.

It describes in detail different methods of compressing graphics data (e.g., runlength encoding, LZW, CCITT, JPEG) and ways of converting from one type of file format to another. It also includes information on new graphics initiatives, including JPEG (an emerging image data compression standard of particular interest in multimedia technology) and MPEG (a set of digital and audio compression standards for sound and motion picture data).

The book comes with a CD-ROM on which they've included a collection of resources that are hard to find (in many cases, they have never before been



Encyclopedia of Graphics File Formats

available outside the organizations that developed them). They've assembled original file format specification documents from such vendors as Adobe, Aldus, Apple, IBM, Microsoft, and Silicon Graphics, along with test images and code examples for many of the formats. Also on the CD-ROM is a set of publicly available software—for MS-DOS, Windows, OS/2, UNIX, and Macintosh platforms—that will let you convert, view, and manipulate graphics files and images.

The book/CD-ROM is pricey at \$59.95 but has the good stuff if you need to deal with graphic files. It's available directly from O'Reilly at 800-889-8969; e-mail order@ora.com. For information: telephone 707-829-0515 (800-998-9938 in US & Canada); FAX 707-829-0104; email nuts@ora.com; or write O'Reilly & Associates, 103A Morris St., Sebastopol, CA, 95472, USA. Access their online gopher catalog via "telnet gopher.ora.com" (log in as "gopher" — no password needed).

A CUT OF THE LONG DISTANCE PIE

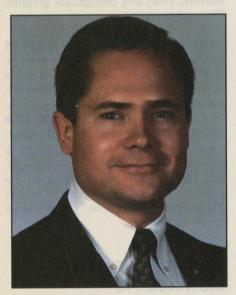
by Brian Gallagher

For years long distance carriers have been garnering a huge windfall from long distance calls to BBSs around the nation and the world, with none of these substantial revenues going to sysops. All that is about to change, as Matrix Telecom, a long distance carrier

with 250,000 customers and an integral part of United Companies, of the Dallas/Ft. Worth metroplex, with \$400 million in annual sales, has positioned itself to entice sysops to their service by offering them a cut of the action.

Founded in 1990, Matrix acts as a reseller of other long distance carriers' networks as well as its own network and will pay sysops a percentage of their system's long distance calling revenues based on a rate of the sysop's choosing. For a BBS to profit from Matrix' services it must have a minimum of 50,000 minutes of toll calling monthly, and each subscriber must have an average billing time of no less than 60 minutes each month.

The reason for the sizable system requirements are the costs involved in joining the Matrix network. A T-1 line is required typically costing between \$500 to \$1,000 for installation with a monthly lease charge of around \$500, however, lease charges can largely be offset by the costs of the 24 telephone lines it will eliminate. In addition, Matrix charges a one-time set up fee of \$250.



Mike Harkins - Director of Sales for Matrix

There is likely no increase in costs to subscribers as it is the sysop who chooses the rate long distance callers will pay and consequently how much of a percentage they will receive. For example, if a sysop chooses to charge a low 15 cents per minute for long distance calls, he or she would receive a check for 4 percent of the revenues for

RETAIL RATE/ COMMISSION OPTIONS (Interstate Only)

Retail Rate \$1400	Commission 0.00%
\$1500	4.00%
\$1600	7.50%
\$1667	10.00%
\$1700	12.50%
\$1800	15.00%
\$1900	17.50%
\$2000	20.00%

those calls. If the sysop were inclined to charge a higher 20 cent per minute rate,

they would receive a check for 20 percent of the revenue for those calls. (For additional pricing structures, please see the rate diagram accompanying this article.)

We did some number crunching and a system charging the 16.667 cent per minute long distance rate, running 10 lines with three hours of long distance calls per day, everyday, on all 10 lines, would garner approximately \$900 in revenues monthly.

Callers' telephone bills will not be affected as the charges through Matrix will appear on their regular statement, at the sysop-chosen rates. And, depending on the rate the sysop chooses, it is possible callers will actually be paying less than previously by connecting to a system with the Matrix service.

Matrix was founded by Texas multimillionaire Ron Jensen who went looking for a better long distance calling plan for a group of insurance companies with which he is involved. After deciding he could do better, Matrix was born. For more information call Mike Harkins, director of sales for Matrix at (817)581-9380 voice; (817)788-3046 fax; or leave a message on their BBS, (817)788-3038. Matrix Telecom, attn: Mike Harkins, 9003 Airport Freeway #340, Ft. Worth, TX 76180.

TIME DOMAIN - NEW BBS NETWORK LINKED BY SATELLITE

by Brian Gallagher

representation of their brother, and their cousins too - want their piece of the Internet pie. While the fight for bandwidth rages among providers and users, an Orlando, Florida company is looking for its pie in the sky - via a private satellite data network, providing interactive multimedia communications between its hub and over 200 systems in major cities across the United States by early 1996.

Touting their plan as a high-powered alternative to Prodigy, CompuServe, Genie, America Online, Delphi and the



rest, David Wenbert, CEO of Time Domain and Company, and Stephen Levin, President and Chief Operating Officer, envision a network comprised of Frisbee-sized, roof mounted VSAT satellite dishes connected through a seven meter dish at an Orlando hub.

Transfer rates between the hub and the VSAT "knowledge capture points" will reach 512 Kbps outbound and 256 Kbps inbound, significantly faster than a 56Kbps leased line or X-25 packet network which also typically run 56 Kbps. This copious bandwidth transfers into some astounding per channel transfer/download rates - 9.6 MB per second with a new and proprietary 600 to 1 data compression technique for video and images, via a 132 MB PCI I/O bus and a 667 MB system bus. Information exchange at this volume and speed will enable the network, Levin said, to become the first "vid-mail post office." To assimilate this data onslaught, some



David Wenbert (left) and Stephen Levin (Right) of Time Domain

pretty hefty hardware will be required, heftier even than the fastest Pentium machines, but there are others...

How about a CPU multiprocessing array utilizing four DEC Alpha 325 Mhz RISC chips, with an unheard of 2 gigabytes of RAM, and a potential 128 gigabyte RAID array, composed of up to 32 four gigabyte scuzzy II hard drives. This microwave sized super computer linked to a 100 CD ROM juke box with read/write capabilities and a flat bed scanner with automatic page feeder is more than the ultimate BBS machine, it is practically unthinkable. The Orlando hub will have an AMPEX DST 810 automated cartridge library, with numerous 50 gigabyte cassettes (about the size of a standard video tape) capable of storing 13 terrabytes of online storage (13 million megabytes), that's 4 billion typed pages or 256 million credit reports. This is more than a dream machine and set up, it's fantasy material.

The system will run under Windows N/T Advanced Server Operating System with a custom version of the Major BBS connecting to the other capture points through Time Domain's proprietary Generic Heuristic Omniscient Server Technology Network, or GHOSTNET. Major was chosen because of its open ended architecture and wealth of third party developers. By connecting the

systems in this way, Time Domain skirts long distance carrier charges, which hold so many other systems hostage, and will offer all basic services to the system for \$1 per call for as long as the caller wishes to stay online.

Setting up the 200+ systems around the nation is going to be quite a task, one that Time Domain is looking for sysops to help out with. In fact, for a sysop willing to "sell" their hardware to the company, become an employee of the company with stock options, a salary - dependent upon their qualifications and how many subscribers they have on their systems, and forsake their freedom as a free wheeling independent sysops, god-like in all respects - they will bring one of these beauties in and set it up in your basement.

By purchasing existing sysops' BBSs around the country, Time Domain hopes to garner the knowledge, skill and subscribers already in the business and gain an instant foot-hold with local calling access for an estimated 100,000 people. (All existing subscribers to a BBS purchased by Time Domain will receive a complimentary subscription to the service over local toll free lines for up to one year.) In addition, anything the Internet has to offer will also be carried over the network. Online legal, tax, financial and medical consultation for a \$1 per minute fee is also planned.

as is a new level of live virtual reality multi-user simulation adventures.

All subscriber fees for the new network will be collected by Time Domain through checking accounts, credit cards and the use of 976 toll calls charged through the local telephone company. Financial backing for this high flying network will come from a merger between Time Domain and another public company with the initial funds likely to come from a private investor through a Wall Street investment banking firm already involved in multimedia/telecommunications ventures. Wenbert, who has a work history in investment banking and merger acquisitions, said the project is likely to start with a price tag of \$30 million and the merger is slated to take place in the fourth quarter of 1994.

"Most of the system operators are not making a profit," Levin said, "I'll be happy to change that for them. They can quit their day job and do it (BBS) full time." At this time there are a dozen individuals, engineers, technical gurus, physicists and Levin, who is a computer sales consultant for a major retail computer chain and has been a sysop in St. Louis and central Florida for 10 years, who have put their time and money over the last year into making Time Domain a reality.

For sysops interested in becoming a capture point for Time Domain - be prepared to sit down with no less than seven pages of forms detailing the bowels of your system and its history in strict contract legalese. For more information call Wenbert, (407)857-8242 voice; or write, Time Domain & Company, attn: David Wenbert, Technology Consulting Center, Suite 2000, 822 East Wallace Street, Orlando, FL 32809.

ONLINE PAYMENTS BY PERSONAL CHECK ELECTRONICALLY

by Brian Gallagher

At the 1896 Chicago Democratic National Convention, William Jennings Bryan's platform focused primarily on changing the monetary system in America to a silver standard, rather than the gold standard. "You shall not press down upon the brow of labor this crown of thorns, you shall not crucify mankind upon a cross of gold,"Bryan so eloquently stated. While Bryan lost the election to William McKinley and the silver standard never was adopted, he would likely turn over in his grave if he knew that the "signature standard" is no longer enforced today.

With the introduction of credit cards in the early '70s, retailers were careful to check IDs, get phone numbers, names and the all important signature - a must for a legal transaction. Today, any retailer can tell you that all of this is largely for naught, signatures included as the only thing that really matters in processing credit card purchases today are the numbers. A natural progression to this monetary finagling is a year old FDIC ruling allowing checks to be processed without signatures as well.

The reason for this onslaught of signatureless, and often paperless method of transactions is that signatures don't fit very well inside of phone lines, while numbers and letters fit readily and travel quickly and easily when placed so.

Applying this new found freedom to the



Darren Humay - CEO American Banking Systems

BBS world seemed a logical progression, at least that's what Darren Humay, Chief Executive Officer of American Banking Systems, of Niceville, Florida was banking on when he went to the ONE BBSCON convention in Atlanta on August 17 - 21. Signing up over 700 bulletin board systems at the show, it looks as if his speculating paid off.

The service offers Checks Direct - the paper draft processing aspect of their service, and Dollars Direct, the elec-

tronic funds transfer aspect of their service. Both begin with the name, address, city, state and zip code, a nine digit routing number (on the bottom of checks identifying the bank) and a driver's license or social security number (for security purposes) of the party wishing to transfer their funds electronically. From here the information is sent to ABS and processed through their security algorithms and accounting departments. Through Checks Direct a paper demand draft is generated and deposited in the retailers account usually within 48 hours; through Dollars Direct, funds are transferred electronically, with no paper involved whatsoever.

The security algorithms ABS has been using in the telemarketing, mail order, and charitable industries has proven effective. Humay said, over the last four years ABS has experienced less than 10 cases of check fraud with most of the offenders being caught. If these odds aren't good enough, ABS offers a check guaranty service, for an additional fee, which guarantees all items they process.

The cost of the service to retailers is based on the amount of moneys transferred through ABS - the higher the amount of the check, the lower the percentage charge, with the highest rate being 1 percent the value of the check, or \$1 per transaction.

Several third party developers are in the process of writing doors, or modules to support ABS, according to guidelines provided by the company. The Major BBS, Wildcat!, Remote Access, PCBoard, TBBS and First Class BBS platforms will likely be supported as well as DOS, Windows, Macintosh, OS/2 and UNIX operating systems.

For sysops looking to expand their subscriber base by making it easier for people to pay in the 1990s, crosses of gold generally hang around the necks of believers and spending money is done at the speed of light - believe it."

For more information about ABS, call their voice line at (904)729-3006, or write: American Banking Systems Corporation, 497 20th Street, Niceville, FL 32578-3264.

BBS DIRECT - PC PURSUIT SUCCESSOR ON STERIODS

by Brian Gallagher

The battle among telecommunication companies is raging on all fronts. It seems every other television advertisement is telling you to switch your carrier because you'll save money, the other guys are cheats, our telephone lines are clearer - "here listen to a pin drop," and our teeth are whiter when we smile, and we always smile.

Similarly, the battle among teleconnection companies, sporting T-1s and X-25s offering local calling access to hundreds of cities nation-and world-wide specific to the online realm, is also heating up. More and more often we see services offering to hook you up to an alternative network, or even use pieces of an existing network at a cheaper rate. for BBSers the end result is almost entirely good - cheaper rates, better connectivity with higher transfer rates, more points of presence in more cities, and (hopefully) better service.



One of the more interesting experiments in all of this was Telenet's PC PURSUIT service popular in the late 1980s. Originally, this X.25 packet network allowed callers to dial into a local access number in any of several hundred cities, grab a modem in any of about 30 destination cities, and use that modem to dial OUT to local bulletin boards in the area. The magic was the pricing, \$25 per month for unlimited non-prime usage. The service was limited to 2400 bps. Telenet was bought by Sprint, and after reaching a high of some 5000 users died out when 2400 bps and X.25 was no longer an acceptable performance, and the service wasn't profitable enough to upgrade it. Since then, bargain hunters looking for cheap X.25 long distance service haven't had much to pick from.

Entering the fray late this September is Concentric Research with their BBS Direct service. By using frame relay technology, touted as having higher transmission speeds, low network delay and a more effective use of bandwidth, Concentric Research hopes to appeal to syops and callers' thirst for speed. The system will open at 14.4 kbps and is slated to be running 28.8 kbps by year's end.

The network, part of an August 15th deal between Concentric Research and Racal-Datacom, Inc., a Sunrise, Florida based company dealing with the telecommunications industry, valued at \$9.5 million in network equipment and services, will offer callers a \$30 per month flat rate for unlimited use, which will also include a free gateway to CRIS, Concentric's online information and entertainment service with full Internet connectivity.

Initially the service will offer local dialup access in 100 of the largest metropolitan areas, expanding to 350 over the next 18 months. Even with the expansion, however, 350 POPs is hardly comparable to the 1,100 offered by some competitors. Taking up a part of this slack will be an 800 number at \$10 per month. Your \$10 will get you two hours of long distance calling through their network with additional hours costing \$5 per.

At the ONE BBSCON show in Atlanta, August 17 - 21, Concentric signed up 30 BBSs to the BBS Direct service. If Concentric deems a system to be large enough, with a large enough customer base it will install the necessary equipment at no cost to the system save a \$100 annual contract fee. Depending upon the amount of traffic projected, and the number of ports a sysop is willing to dedicate to the service, a 56 kbps, 128 kbps, or T-1 line will be installed along with a Wellfleet router via Racal-Datacom, a Wellfleet value-added reseller.

Concentric Research Corporation, 400 Forty-First Street, Bay City, MI 48708; (800)745-CRIS voice; (517)895-0500 voice; (517)895-0510 BBS; (517)895-0529 fax.

GRAPHIC INTERFACE

The TeleGrafix Communications, Inc. group, led by an ebullient Pat Clawson, was showing the new RIP version 2.0 with JPEG photo-realistic graphics to an enthusiastic crowd. While the graphics were a knockout, the enthusiasm was somewhat dampened by the note that 2.0 is STILL coming, still in beta, and that TeleGrafix planned on charging a nominal fee for callers to use the terminal program. The fee was variously reported as \$20, \$10, and that they would be shipping a million copies free, but with an \$8.99 shipping and handling charge. Rest In Peace.

eSoft was showing RIP 2.0 on their TBBS demonstration system, but Angela Pope rather stole the show there by walking in with a diskette and demonstrating her TBBS system for her Florida newspaper, with RIP graphics. Probably thirty newspaper people were wandering the convention with a very serious eye to the technology and what was possible. Bob Baskerville of MMB Development made some headway with this crowd with his UNIX-based TEAMate product.

Windows clients and servers were very much the rage at ONE BBSCON this year. Seth Hamilton, developer of ROBOFX, was down from Ottowa showing a new product he calls Media-Host that acts as a BBS and comes with a free Windows client. The system is not only very stunning graphically, but uses a packet communication system over the modem to support multiple simultaneous activities over one dialup line. This 18 year-old Ottowa native, when armed with a compiler, should be considered a deadly weapon in this industry. And MediaHost and the accompanying MediaBase product was indeed causing injury on the floor among attendees.

Softarc, long a leading presence in the Macintosh community with their FIRSTCLASS BBS package, is playing an extremely strong strategy across multiple platforms. Not only do they have Macintosh and Windows client software, but they are moving the host software onto Microsoft Windows AND UNIX - promising to fully cross all barriers with both host software and client software. Additionally, they have some absolutely mind blowing capabilities to use NCSA Mosaic as a front end

for e-mail, and conversely, e-mail with links to graphics, video, audio, etc. Multimedia e-mail that is effortless to use. This too changed the world view of interactive bulletin boards. They sported a gorgeous booth display that attracted quite a bit of attention.

Novalink Professional for the Macintosh was also demonstrating some stunning screens, along with very capable Internet connectivity.

Darkstar nearly stole the show from way out in left field with demonstrations of their Darkstar BBS. The product actually transfers and plays video clips in .FLI format, sound files in .WAV format, and graphics as an integral part of the BBS design. The result is VERY multimedia, the package very inexpensive. Still in development, the beta version we were offered wouldn't actually answer the telephone yet, but they promised it was ready soon.

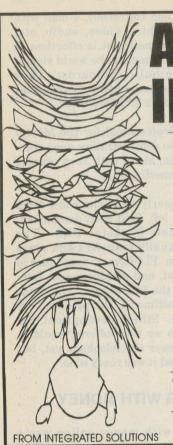
DEALING WITH MONEY

Dealing with money online was a surprisingly big topic. Bob Houston gave a presentation on NetCash, subject of an earlier Boardwatch article on this ASCII e-mail method of swapping money online.

A surprise guest in the seminar circle was Dr. David Chaum, one of the leading cryptographic experts in the world who actually designed an automated payment system now in use on some toll roads. Dr. Chaum presented information on his DigiCash system, similar to NetCash but with stronger security features.

American Banking System was on hand to talk about a system where BBS operators could allow callers to provide the routing number and account number of a personal check and authorize payments WITHOUT any Master Card or Visa - essentially an electronic version of paying by personal check. They claimed to have signed up over 700 BBS operators for this service at their booth.

Galacticomm had a fairly enormous booth showing their Major BBS, Major BBS for UNIX, and their new Internet Connection Option. But they also had a separate test setup with a company called Equinox. Stung by the recent software performance comparisons with eSoft's TBBS, they have moved the game to hardware by teaming with a



ARE YOU SUFFERING FRO

If you're just starting a Bulletin Board System, you need the industry's #1 BBS Starter Kit!

BBS STARTER KIT INCLUDES:

- Complete step-by-step guide to starting a BBS.
- Fully functional BBS test drives from the industry leaders.
- Exclusive discount coupons and savings information.
- Databases Online a "how to" guide. - Internet & other network E-mail "getting started" reference.
- Free trial memberships to popular online services.

"...with this non biased starter kit, an individual is able to make an educated buying decision. " - Nick Anis, BBS Columnist.

TOLL FREE 800-633-6636 or 909-782-8205

BBS Software & Hardware

This Month's Specials

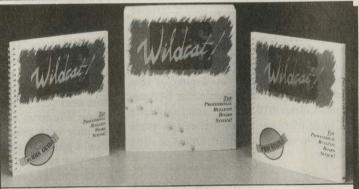
More BANG for the Buch!

MajorBBS, 6.2, 2-line with Birthday Greeting	or
Message Broadcaster	.\$179
We Carry MajorBBS Add-on Modules	CALL
TBBS 2.2m, 16-line	. \$599
TBBS 2.2m, & TDBS 1.2m, 16-line	\$1199
TDBS Code Generator, create a database in	
minutes w/o programming	CALL
TBBS RIP Games, Add-ons	

Call our BBS: 209-498-6533 for product information and to download our complete catalog!

Digiboards, GTek, CD Disks	CALL
Digiboard PC/8 with 16550's	
RipPaint from TeleGrafix	
Q-Modem Pro for Windows	

Visa, MasterCard & AmericanExpress Accepted P.O.'s Accepted - C.O.D.



Wildcat! ◆ "The World's Most Popular	BBS"
Wildcat! BBS Single Line NEW VERSION 4!!	\$88
All Versions of Wildcat! 4 in Stock!!	
Wildware! wwBirthday, wwVerify, wwNewUser	Call
wcCODE, wcGATE, wcPRO	
Game Pack \$49 value, (ordered w/Wildcat)	\$10
DesqView386 Multi-tasking W/QEMM	. \$112
4 Port Serial Card with 16550 UARTs	Call
Digiboard PC/8e, w/cable (use w/Wildcat! IM)	. \$575

BBS Technologies

209-498-0200

P.O. Box 4290 ♦ Fresno, CA 93744 ♦ FAX 209-237-0206



modemPro for Windows by Mustang Software zooms past the competition. With no roadblocks in sight. This feature-filled, power-packed communications software makes it easy for Windows users to dial into BBS systems. It's the first program to support both data and fax communications from a single phonebook. With a modem that supports adaptive answering, you can receive both fax and data calls while in Host Mode, a limited-feature BBS program that lets you set up your PC to receive incoming modem calls. You can also send a fax directly from any Windows application using the QmodemPro for Windows printer driver. It's easy. It's all in one integrated package. And it's available now.

QmodemPro for Windows is the first Windows product to support RIPscrip graphics, so you can plug into the thousands of BBSs offering graphics and full mouse support online. It also has more than 30 of the most popular terminal emulations, 10 built-in file transfer protocols including Zmodem, CIS B+ and Kermit, plus up to 40 programmable macro buttons. QmodemPro for Windows also lets you associate icons to each entry in your dialing directory, so you can create a true Windows phonebook. Each phonebook entry tracks up to 5 numbers, and groups of entries can be saved and dialed.

With QmodemPro for Windows, file transfers are made easy with features like drag-and-drop uploads from the Windows File Manager and live .GIF file viewing during downloads. The built-in .GIF viewer lets you zoom .GIF and .BMP files, or mark and copy portions of the picture to the Windows clipboard. You can put the Windows multitasking environment to work: use it to transfer files in the background while you work in your word processor or spreadsheet applications, or get in a few guick games of Solitaire. No other communications software does Windows like QmodemPro.

QmodemPro's new script language, SLIQ, gives you unparalleled power, speed and flexibility. With the AutoLearn feature, you can let QmodemPro record your scripts automatically without having to learn how to program. SLIQ scripts are compiled for fast, secure operation, plus we include a powerful script debugger and text editor.

QmodemPro for Windows also supports sound cards, so you can play your favorite. WAV file automatically when you connect to a BBS, and during other events like a successful fax transmission.

Whether you're a BBS beginner or a seasoned modem user, you'll find QmodemPro for Windows to be a flexible, easy-to-use communications tool, with twice as many features as competitive products. And at a better price: only \$99 retail.

(DOS version also available)

If you want to get on the information superhighway, don't get stuck in the slow lane. Move ahead fast with QmodemPro for Windows by Mustang Software.

Available Non iner Software

Call Today 800-807-2874

Connecting The World In '94

Mustang Software, Inc. • 6200 Lake Ming Road • Bakersfield, CA 93306 805-873-2500 • FAX 805-873-2599 • BBS 805-873-2400

THE MAJOR BBS





The Major BBS V6.2x (2-user)	\$CALL\$
User Six-Pack	. \$179.00
Advanced Lan Option	. \$499.00
X.25 Software Option**	
DOORWAY by TriMark Engineering	\$49.95
RIPaint	
Fax Online	\$179.00
Major Gateway/Internet	\$179.00
The Major Database	
Shopping Mall	\$179.00
Search and Retrieve	
Dial-Out	\$149.00

Entertainment Collection	\$179.00
Developer's C Source Kit	\$299.00
Extended C Source Suite	\$429.00
Fax Online Developer's Kit	. \$79.00
The Major Database C Source	\$559.00
Shopping Mall C Source	
Search and Retrieve C Source	
Dial-Out C Source	
Entertainment Collection C Source	\$289.00
Galactiboard (8-port serial card)	\$439.00
Galactibox (16 slot modem chassis)	\$1279.00
OST PC XNet Card	\$1089.00
UST FU AINEL CAID	1005.00

*Free overnight shipping applies only to software orders with shipping destinations in the continental U.S. • **Requires PC XNet Card • Prices subject to change without notice • Sales tax (where applicable) not included • All trademarks belong to their respective companies.

When you buy from Logicom, not only will you get great prices, you'll get a full time staff of the most experienced customer support specialists in the BBS industry — second to none! How many others can boast about that? Since 1987, we have contributed to the development, and have become the largest reseller of GALACTICOMM products. We also have our own extensive line of add-on modules and utilities to enhance your system. To order, or for more information, give us a call today.....

1-800-764-4266

Outside the U.S. call (305) 726-3868 FAX: (305) 726-3748 • BBS: (305) 726-3849











Upgrading Your Modem...



Can Be A Painful Experience,

(408) 262-1277

Not To Mention Expensive!

SoftModem users don't experience the pain and expense of upgrading their modems. That's the value of SoftModem Technology.

Tired of ripping your PC apart every time there is a change in modem standards or performance improvement? Well maybe its time you tried a Connection Series SoftModem from Digicom Systems? Our exclusive SoftModem Technology lets you avoid the frustration and expense of adding new hardware by simply inserting a new diskette or dialing into our BBS (bulletin board service) to update to the latest technology.

Increasing the modem's speed from 9600 to 14,000 to 19,200 bps, or adding fax and voice capabilities to a reprogrammable DSP (digital signal processing) based modem is both easy and inexpensive! For information about the benefits of SoftModem Technology and our Connection Series modems. **Call 1-800-833-8900**.



CD-STONE, Our NEW! Benchmark, Test, and Utilities CD-ROM Disc.

Designed to Help You Obtain Maximum Performance from Your Computer and Installed CD-ROM Drive! CD-STONE Measures Throughput as well as Access Time in a Reliable and Consistent Manner for a Meaningful Real-World Benchmark for CD Drives, Includes Tests for MPC Level 1, and 2, Plus Audio Playback Capabilities. Utilities Include Extended Drive and Media Information Viewers with Support for Data Sector Capture to File, Plus Full Audio Playback Facilities and Options For Digital Audio, Special Utilities to Read Audio Tracks as Data, & Capture Audio Tracks & Sectors to . WAV Windows Files! Special Windowed, Mouseable Interface! Tests, & Utilities NOT Available on Any Other CD-ROM Discs!

For a Limited Time CD-STONE is FREE with ANY CD-ROM Disc Purchase! If Purchased Separately, CD-STONE is \$19.95 each plus \$6.00 for Shipping and Handling

WARNING!

This Disc Contains Information No One Wants You To Know About!

This Disc Contains Information About Hacking, Phreaking, Tone Box Information. Anarchy, Subculture, Magic, Internet & Computer Security Secrets, FBI & Police Net Files, Virus Code, Sick & Twisted Graphics, UFO, Occult, & A Whole Lot More! Everything Fun and Interesting That Absolutely No One Wants You To Know About! Includes MegaSearch "Hypertext Search" for those Fascinating Late Night Text Searches. & (If You Dare) for BBS there's files.bbs & Our New! Mouseable Remote User "Hypertext Search!" Interface & BBS Door "MegaTerminal & "MegaDoor"

SRP \$79.00 OUR EXCLUSIVE! Special price Only!

ALL NEW! MEGA CD-ROM DISCS

All Mega CD-ROM Discs Include MegaSearch Hypertext Search for both DOS and Windows!

MegaFile - Creates
ANY and ALL files.bbs!

FREE! Hypertext BBS Door & Our Mouseable Remote User Interface with Hypertext Search! MegaDoor & MegaTerminal

PC Shareware Spectacular
650 Megs 1 Plus Gigs Uncompressed!
Our 4th. in The Mega CD-ROM Series.
100% Virus Free and Contains Utilities
of All Types, Word Processors, Data Base,
Communications, Graphics Tools, CAD,
Business, Education, Programming,
Hobby, Garnes, Sports, Sound Files, 256
Color GIF's, FLI's, Bibles, Fonts, Desk Top
Publishing Programs, BBS Programs,
Plus A Whole Lot More!

Our 3rd, in the Mega Windows Shareware & Public Domain Software, Including Utilities of All Types, Windows Business Applications and Programs of All Kinds, Windows Communications Programs, Windows Games, Windows Ponts, Windows 256 Color Graphics. BMP, Windows. WAV Sound Files, Windows Drivers and Icons, and Much Morel

Drivers and Icons, and Much More!

Our 2nd. Mega Games Contains PC
Games from Shareware Companies such
as Apogee, and Epic, plus many many
others. Game Bytes Electronic Magazine,
with file categories that include Arcade,
Action, Adventure, Puzzles, Mind and
Strategy, War Games, Card Games, RPG
Games, Plus 256 Color GIF's, FLI's of all
types and Includes .MOD, .ROL, .WAV &
.VOC PC Sound Files, and Even More!

3 Disc Set

1,892 Megs

contains over 16,000 Files!

All 3 Only!

SET/3

MEGA CD-ROM

IF YOU JUST

WANT ONE

THIS IS

THE ONE

TO BUY!

EACH

for adults only!

Volumes 1, 2, & 3 Best of the Best

For Adults Only "GOLD" "Wife Proof Labels"

Each Over 600 MegaBytes Many Not On FAO 123 - 256 Color SVGA Gif's with NO BBS Logos! Plus Animated FLI's, GL's, & DL's, Includes Games, and Fantasy Text Files. SRP \$79.00 ea.

Volumes 1, 2, & 3

For Adults Only "Wife Proof Labels"

256 Color SVGA GIFs, Plus Animated FLI's, GL's & DL's Includes Games, & Fantasy Text Files. 3 Disc Set 1,892 Megs - Over 16,000+ Adult Files! SRP for this Set of 3 Discs \$199.00.

Special Offer! tao Six Pack All 6 tao Adult CD-ROM Discs Only \$139.00

600 Megabyte Adult CD-ROM Disc

This is Definitely NOT Trains & Airplanes "Wife Proof Labels"

Over 600 Megabytes - Includes GOCD. EXE The Worlds Easiest CD-ROM Interface - 256 Color SVGA Gif's Plus Animated FLI's GL's & DL's Includes Loads of Games, & Fantasy Text Files.

tao Discs are BBS Ready! with MegaDoor/MegaTerminal/Files.bbs - L&A with Files.bbs

"Wife Proof Labels"

Genuine SON

The Best of

the Best" \$39.00 each

The Full Set All 3 Only!

Caddies \$3.50 each with Any \$49.00 CD-ROM Disc Purchase! Limit of 10 Per Customer

THE PROFIT GROUP, 824 E. Ft. Lowell Rd., Tucson, AZ 85719

VISA°

CREDIT CARD AND C.O.D. ORDERS ONLY! CALL TOLL FREE

Dealer Info. (602) 770-0000 - FAX Orders (602) 770-0005

The prices listed above do not include shipping and handling. Special shipping & shipping to foreign countries is available.

manufacturer of smart serial cards. They showed an impressive 128 lines connected in their test setup, and the system was transferring files at 38,400 bps on all ports in very impressive fashion. In the same move became the first multiline BBS software to convincingly support 230 kbps port speeds. Equinox has developed some smart serial port hardware that may be the most elegant we've ever seen. The ports can be configured for speeds up to 230 kbps. A single PC adapter card plugs into the motherboard, and a cable runs out to an absolutely elegant little device that sports 16 RJ-45 modular connectors that are in fact serial port connections. It also has a single more conventional D connector in the side allowing you to plug a SECOND 16 port segment directly into the first - without cables. You can gang these to provide up to 128 ports - all fed from a single slot on the motherboard and running at some very impressive port speeds. Galacticomm and Equinox had worked together on a driver to allow Major BBS to use the system. And it purported to triple the aggregate cps for the system to over 600,000 cps from a single Pentium PC - essentially tripling the file download capabilities of Galacticomm's Major BBS system. When used with this option. They had recently added the Galacticomm Custom Device Interface GCDI for hooking in TCP/IP and other such drivers, and the Equinox interface was a fortuitous byproduct.

Mustang Software rented a session room at ONE BBSCON to hold a dedicated symposium they called Mustang University. They held educational sessions and workshops on various communications products there continously from early Thursday afternoon through the end of Saturday, with Wildcat sysops able to learn advanced tricks on running a Wildcat BBS using an array of tools including the new WcCODE programming language. By all accounts, the Wildcat BBS operators were very taken with the format and depth of this coordinated series of sessions.

Thursday evening, the event broke into a series of semi-private hospitality suites across the town. We develop a small utility program titled PIMP for porting e-mail and newsgroups to the Internet via UUCP, and several operators on the support mailing list mentioned they'd like to get together. So we put together a little get-together

at the Presidential suite of the Westin Peachtree Plaza hotel, expecting 15 or 20 PIMPsters to stop by. Over 200 attended, and drank the PIMP project into non-profit organization status on Thursday evening. It was one of those surprising turn of events that keep us forever young.

Friday evening, a series of very open hospitality suites were held on the 10th floor of the Mariott Marquis hotel - a dramatic scene with a huge open atrium from the lobby up some 45 floors. A dixieland band provided entertainment with vendors offering hospitality areas and food including Hayes Microcomputer Development, ZyXEL USA, delta-Comm Development, Galacticomm, Inc., eSoft, Inc., and Boardwatch.

Also on Friday, the Ziff Davis Interactive group hosted a banquet at the Marriot honoring shareware authors and products in an awards ceremony.

Saturday evening was the John C. Dvorak Awards for Technical Excellence in PC Telecommunications. Hosted for the third year at ONE BBSCON, this year's awards presentation was sponsored by Hayes Microcomputer Products, Inc. The presentations

were made at a banquet in the Marriot Marquis.

The lifetime achievement award winner this year was Don Watkins, sysop of the IBMnet series of forums on the CompuServe Information Service. This quiet, unassuming man has been working in the BBS and online community for over 15 years, operating bulletin boards, supporting user groups, and essentially brought CompuServe to the table with specialized forums in the early days of the service. The IBMBBS forum, for example, supports one of the largest online gatherings of BBS operators in the world every day.

Watkins was congratulated by Ward Christensen and Dennis C. Hayes, previous lifetime achievement winners.

Other winners of the Dvorak Awards included:

- America Online, Inc., Best Commercial Online Information System
- NetManage Internet Chameleon -Outstanding Internet Front End
- AT&T Microelectronics -Outstanding PC Telecommunications Technology (first V.34 chipset)



EXPLORE the INTERNET!



FIVE HOUR FREE TRIAL!

Dial By Modem 1-800-365-4636, Press return until you get a prompt At Username, enter JOINDELPHI. At Password, Enter BW948

Offer applies for new members only. A valid credit card is required for immediate access. Other restrictions apply. Complete details are provided during the toll-free registration.

Attention Current Internet Users: See what DELPHI can offer you! Stock quotes, Grolier's Encyclopedia, newswires, and hundreds of other services are just a few keystrokes away. Telnet to delphi.com and enter the username and password above for a free trial.

DELPHI is the only major online service to offer you full access to the Internet. And now you can explore this incredible resource with no risk. You get 5 hours of evening/weekend access to try it out for free!

Use DELPHI's Internet mail gateway to exchange messages with over 20 million people at universities, companies, and other online services such as CompuServe and MCI Mail. Download programs and files using FTP or connect in real-time to other networks using Telnet. You can also meet people on the Internet. Internet Relay Chat lets you "talk" with people all over the world and Usenet News is the world's largest bulletin board with over 4500 topics!

To help you find the information you want, you'll have access to powerful search utilities such as "Gopher," "Hytelnet" and "WAIS." If you aren't familiar with these terms, don't worry; DELPHI has hundreds of expert online assistants and a large collection of help files, books, programs, and other resources to help get you started.

Over 600 local access numbers are available across the country. Explore DELPHI and the Internet today. You'll be amazed by what you discover.



Questions? Call 1-800-695-4005. Send e-mail to INFO@delphi.com

- DSC BBS/Voicenet Outstanding BBS and BBS Internet Connectivity
- Delphi Internet Outstanding Global Connectivity Service
- E-Mail Connection Outstanding PC Telecommunications E-mail Utility
- ExecNet Outstanding BBS and BBS File Software Bank
- Exec-PC Best Overall BBS
- NCSA Mosaic Outstanding Multimedia Internet Utility
- Mustang Software, Inc.

 Outstanding PC Telecommunications Software QmodemPro for Windows
- Mercury Center/San Jose Mercury News - Outstanding Newspaper Online Coverage and Forum
- Newsbytes News Network Outstanding Online News Service
- PCBoard Programming Language -Outstanding PC Telecommunications Technology.
- Planet Connect Best BBS Product/Service of 1994
- QwikMail I and II Format, QWK/REP for Outstanding E-mail Standard/Technology
- TIME Online/TIME Magazine -Outstanding Online Magazine Coverage and Online Forum

PAINT SHOP PRO 2.0 - A GOOD GRAPHICS UTILITY GETS BETTER

By Alan D. Bryant

It all started as a joke. The ladies around the office wondered aloud just once too often what it would look like to see our own Adam Hudson just a little taller, just a little better built, and with just a bit less clothing. Not being one to miss participating in a little intraoffice humor, I knew just what my mission was to be: paste the head of our Adam onto the body of whatever I could scrape up on the local BBS circuit.

Being scannerless, getting Adam's head electronically would be tough. I decided to turn to my friends at Boardwatch. I dropped in on a Thursday in the early evening, and outlined what I was after for Jack, who promptly dispatched staffer Charlie Moore to track down a pair of Kodak Photo-CDs from within a rather elaborate horizontal filing system. In a few minutes, Charlie was able to extract the CDs. Jack handed me the discs with a brief note that he recommended HiJaak for Windows for reading the images. Remembering that I'd bought a copy of HiJaak, I dashed home prepared to do business.

Upon arrival, however, it became painfully obvious that I had dreamt the whole thing about owning HiJaak (maybe it was the coffee at Boardwatch that did it). So there I was, late at night, trying to figure out how I was going to read an image of the Photo-CDs. It was time for a shareware hunt.

Local Denver BBSs turned up dry on this front, with keyword searches for "kodak" and "photo" coming up empty. It was off to Chicago to Aquila, where Kevin Behrens and his crew didn't let me down - their Windows forum had several utilities that purported to support the Photo-CD. The one that caught my eye was Paint Shop Pro (PSP), a popular graphics utility for Windows. I'd used PSP before, but was never very enamored of its interface. Since this was a new version (2.0 in fact) I grabbed it.

After unzipping and installing PSP, it was immediately apparent that its makers had spent a lot of time enhancing the product for its 2.0 release. The basics of the program were the same as the earlier version, but everything had been enhanced and polished a great deal. In addition, they had added support for several new graphics formats, including the Kodak Photo-CD format I was after. The format line-up includes virtually everything you may need: BMP (Windows), GIF, PCD (that's the Photo-CD format I needed), PCX, TGA (Targa), common flavors of TIFF, the increasingly popular JPG / JIF, as well as several others you may need in a pinch.

I slammed the Photo-CD in my drive, and just a few mouse clicks later, I had the image I was after displayed on the screen in high resolution 24-bit color. Since I'd be using Corel PhotoPaint for this job (not the best choice, but it's all I had), I saved the image as a 24-bit PCX file.

I shopped around on local BBS for a nice body on which to mount Adam's head, and managed to find something suitable, and remarkably enough, in good taste. But Adam's head wasn't the right size, so it was back to PSP for some adjustments.

On the return trip, I spent some time with their help system. Whoever wrote the help was clearly a better programming than writer, with several grammatical errors making the reading a bit of a rough ride in some places. But aside from the technical merits of the writing, there was a wealth of information available about the program. The most striking part of the help system, however, was the extensive information available about each file format supported by the program. Each description was thorough, including a history, who is responsible for the format, and what various modes are available (color, 24-bit color, and so on). These descriptions taken as a whole constitute a valuable resource by themselves.

Another little gem in the help system was complete instructions on how to change the opening screen in Windows from the standard Windows logo on a blue box to something a bit more unique and creative.

In addition to displaying and converting between several common (and a few uncommon) bitmap image formats, the program has built-in facilities for capturing Windows screens. I tinkered with this briefly; it works great, and helps make PSP a one-stop bitmap graphics toolkit.

PSP doesn't really let you edit the image you're displaying per se, but you can tweak it in a variety of ways. Cropping and reducing are supported, and you can make adjustments to the image such as contrast, brightness, color depth, and conversion to grey scale. A color inversion effect called solarizing has a particularly neat effect on the image. Once the image has been adjusted as desired, you can save it in virtually all of its supported formats, or copy it to the Windows clipboard for pasting into another application.

ROM BBS Ready Aminet Amiga (2/94)......\$15.95 CICA Microsoft Windows (4/94)...\$14.95 Dr. Communications.....\$12.95 So Much Modem Madness......\$20.95 So Much Shareware #4 (5/94)....\$19.95 Software Vault Ruby (8/94).....\$22.95 CD Caddy.....\$4.95 Philips CM205 CD-ROM Drive.....\$69.95 PO Box 177617 - Irving, TX 75017 Order Online via BBS 214-790-1874 Ill promptly replace any defective CD within 30 days of purchase.

Echomail Processing Made Easy!

LDMAI

For Wildcat! Systems

- Wildcat! Versions 3 & 4 Compatible
- Support for 32,760 Areas.
- Seamless Planet Connect Integration. Highly Advanced Area Request.
- Time Saving "Global" Modifications.
- Supports all FTSC Networks.
- Context Sensitive Help Throughout.
- Knowledgeable Technical Support.

's here!

Download a Free 30 Day Evaluation Copy!

Only 899

See us at ONE BBSCON booth #154

BBS: (909) 683-0916 Voice: (909) 782-8205

Toll Free: (800) 633-6636

In addition to our \$10 line, TABS now offers a \$25 line.



America's Premier 900-Billing Service

Free Sign-up • Free So

Hassle-Free Billing - TABS eliminates all of the work associated with billing and collecting. Users call your BBS prepaid, and TABS sends you one large check each month. Easy for you. Easy for your customers.

How TABS Works

- As a TABS customer, you'll receive a list of unique, 7-digit subscription
- Callers use your BBS like they normally do. Same phone number. Same features. TABS just provides an easy method of payment.
- A quick, one-minute call by your users to the TABS 900-number gives them one subscription ID from your list.
- They offer the ID to you as "proof of payment" and a \$10 or \$25 charge will appear on their telephone bill.
- You administer their \$10 or \$25 worth of access any way you choose.
- True Media withholds a percentage and the rest is sent to you.

AUBE Telephone Access Billing System

All TABS information and sign-up is available on THE SYSOP'S EDGE BBS (407) 722-3406 Voice Information & Support: (407) 722-3150 FAX: (407) 722-3154

True Media Inc.* 1270 Clearmont Street Northeast * Palm Bay, Florida 32905

You can get started TODAY

- Call our BBS at (407) 722-3406.
- Download our information pack: TABSINFO.ZIP
- Sign-up and get started on-line. Download your free TABS software and subscription IDs.
- Print and sign your service agreement.
- FAX (407) 722-3154 or mail the agreement to True Media, Inc. Your account is activated as soon as we receive your
- agreement

Our Guarantee...

There is no risk. No obligation. You can cancel for any reason. If you do not see a significant increase in your prepaid user base, just call TABS, and we will cancel your account. Our risk. Not yours.

New with this version is a set of tools - a small window with six icons that stays on top of the image and can be moved anywhere on the screen. There's a hand tool to move the image within the window (when the image is larger than the window itself), and a zoom tool that lets you zoom in with a left mouse click and zoom out with a right mouse click. The remaining tools aren't of great value given the real mission with this program; in essence, they let you mark a rectangular area on the image and drag it to another place on the image.

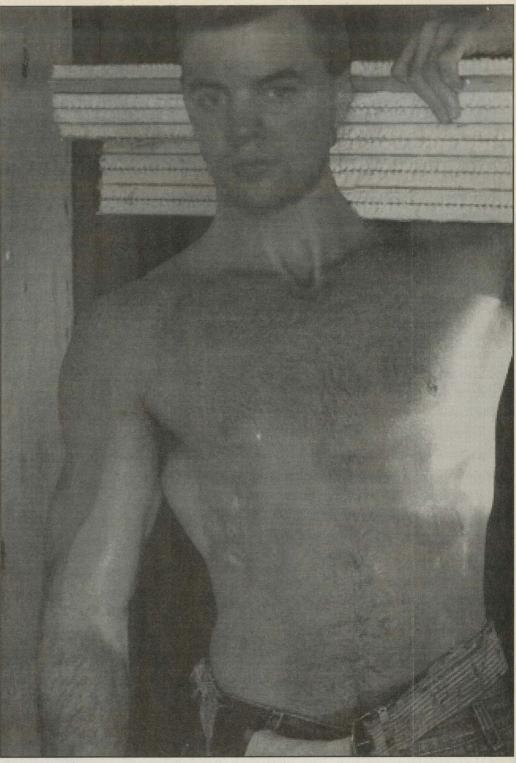
Of somewhat greater value is the range of special effects filters. Broken into four categories (edge, normal, special, and user defined) the filters can be of great value in adjusting the overall image. The normal filters are the ones you'll likely use most often; they let you sharpen or soften an image. The special filters let you play with fun but probably not horribly useful effects like posterizing. User defined filters are available, and it's a concept I've not seen before. The program lets you custom create filters, designating what happens and to what degree. You can burn hours experimenting with the results of your tweaking.

JASC upped the price of their new version by \$20, bringing the registration cost to \$69. On par with commercial software price-wise, the product is also on par with commercial software in quality and robustness. It doesn't appear to have all the capabilities of something like HiJaak, but it comes close and you can try it before you buy with a

minimum of "please register" nag screens.

In the end, I never did manage to get my Adam cut-and-paste job to look quite right, but it was fun trying, and it's always nice to discover a great new utility in the vast and sometimes lackluster shareware arena.

Paint Shop Pro is available as PSP20A.ZIP and PSP20B.ZIP from Aquila



Venus de Adam al la Paint Shop Pro 2.0

BBS, Chicago, IL, (708) 820-8344 BBS, (708) 820-0480 Voice. It's also available via anonymous ftp as PSPRO20.ZIP from sites including oak.oakland.edu in the /pub/msdos/windows3 directory. Paint Shop Pro Version 2.0, JASC, Inc., 10901 Red Circle Drive, Suite 340, Minnetonka, MN 55343.(612) 930-9171 Voice, (612) 930-9172 Fax.

[Editor's note: Alan D. Bryant is a contributor to Boardwatch, and author of the book Creating Successful Bulletin Board Systems, published by Addison-Wesley, ISBN 0-201-62668-3.]

Modem Watch BBS Discount Prices Special Reduced Prices for BBS Operators

VENDOR	MODEL	LIST	SYSOP	BBS	VOICE	FAX
T&T Paradyne	Dataport 14.4/Fax	\$329	\$165	813-532-5254	813-530-8276	813-530-2398
TI Technologies	19200 ETC-E	\$279	\$189	905-764-9404	905-882-2600	905-882-2620
Cardinal Technologies	MVP192E 19.2k V.32terbo	\$229	\$119	717-293-3074	717-293-3000	717-293-3104
Computer Peripherals	Viva 9624e V.32	\$349	\$249	805-499-9646	805-499-5751	805-498-8306
Digicom Systems, Inc	Scout Plus Terbo 19.2k	\$269	\$155	408-262-1412	408-262-1277	408-262-1390
Digicom Systems, Inc	Scout Plus Terbo for Mac	\$289	\$160	408-262-1412	408-262-1277	408-262-1390
Digicom Systems, Inc	Scout Classic V.32bis 14.4K	\$199	\$109	408-262-1412	408-262-1277	408-262-1390
GVC Technologies		\$	\$	201-579-2380	201-579-3630	201-579-2702
GVC Technologies		\$	\$	201-579-2380	201-579-3630	201-579-2702
Galaxy Networks	UFO V.32bis	\$999	\$299	No BBS	818-998-7861	818-998-1758
Hayes Microcomputer	Optima 288 V.FC + Fax	\$579	\$288	404-446-6336	404-840-9200	404-449-008
mage Communications	Twincomm 9600 V.32	\$299	\$279	No BBS	201-935-8880	201-935-654
ntel Corporation	SatisFAXtion 400e 14.4k	\$399	\$249	503-645-6275	503-629-7000	503-228-970
ntel Corporation	14.4 External	\$199	\$109	503-645-6275	503-629-7000	503-228-970
Microcom	DeskPorte FAST 28.8	\$499	\$249	617-255-1125	617-551-1000	617-551-198
Microcom	DeskPorte FAST ES 28.8	\$299	\$149	617-255-1125	617-551-1000	617-551-198
Multi-Tech Systems	MT1432BA	\$699	\$350	612-785-9875	612-785-3500	612-785-987
Multi-Tech Systems	MT932BA	\$749	\$375	612-785-9875	612-785-3500	612-785-987
Practical Peripherals	PC288SA V.FC	\$499	\$220	805-496-4445	805-497-4774	805-374-720
Practical Peripherals	PC288MT V.FC	\$349	\$160	805-496-4445	805-497-4774	805-374-720
Supra Corporation	SupraFax 28.8 V.FC	\$299	\$169	503-967-2444	503-967-2400	503-967-240
Telebit Corporation	WorldBlazer	\$1099	\$429	408-745-3861	800-835-3248	408-734-333
Telebit Corporation	QBlazer	\$599	\$299	408-745-3861	800-835-3248	408-734-333
J.S. Robotics	Courier V.EVERYTHING w/V.FC	\$795	\$249	708-982-5092	708-982-5010	708-982-082
J.S. Robotics		\$	\$			
Ven-Tel	EC144FAX 14.4k V.32bis	\$329	\$215	408-922-0988	408-436-7400	408-436-745
Zoom Telephonics	VFX 28.8 External V.FC/V.32	\$269	\$159	617-423-3733	617-423-1072	617-423-923
Zoom Telephonics	VFX 24k External V.FC/V.32bis	\$229	\$130	617-423-3733	617-423-1072	617-423-923
ZyXEL	U-1496RE+/19.2 Rackmount	\$499	\$349	714-693-0762	714-693-0804	714-693-070
ZyXEL	U-1496RE/16.8 Rackmount	\$499	\$349	714-693-0762	714-693-0804	714-693-070
ZyXEL	U-1496E+/19.2k V.32bis	\$499	\$349	714-693-0762	714-693-0804	714-693-070
ZyXEL	RS-1602E Rack Chassis	\$799	\$499	714-693-0762	714-693-0804	714-693-070

The above quoted prices are for purchases by qualified Sysops only. Public purchases are retail prices, and are not available through Boardwatch Magazine.

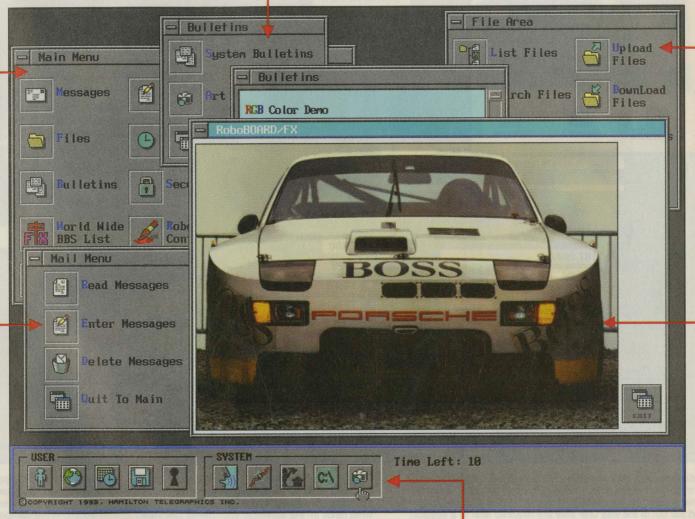
RoboBOARD



Graphical Communications Software for DOS

The RoboBOARD programmable menu structure allows for a high degree of flexibility in the appearance and the design of your Online system.

Photo images, text, and drawing commands are used to create visually powerful system bulletins! Lightning fast database file system, powerful wildcard and text searches, realtime Gif image previews and seamless CD-Rom support make RoboBOARD the system of choice for any image orientated Online system.



Email areas can be configured as Local, Echo, USENET or Internet. Users are presented with an easy to use text editor to do Online messaging. Messages can be quoted, uploaded, downloaded and printed while Online.

RoboBOARD can display 640x480x16 VGA to 1024x768x256 SVGA graphics on both the SysOp's and the Caller's end of the connection! Click on the buttons to edit user settings, chat, and even capture screens in GIF format. UART, Fossil and DigiBoard support included!

Realtime JPEG photo images are typically transmitted in 5 to 20 seconds at 14,400 baud and are scaled in realtime to 256 or 16 colors depending on the callers video display adaptor. This insures the highest quality images possible for all callers.



VISA MC Orders & Info 1-819-682-9737

14.400, N.1,8 Download a Demo System 1-819-682-7771

Test Drive Todayl

MediaHouse Software Inc., PO Box 633, Aylmer, Quebec, Canada, J9H 6L1

RoboBOARD and Tel-FX are trademarks of MediaHouse Software Inc. All other trademarks are the property of their respective owners.

MEDIABASE Online Database Software

Online Database

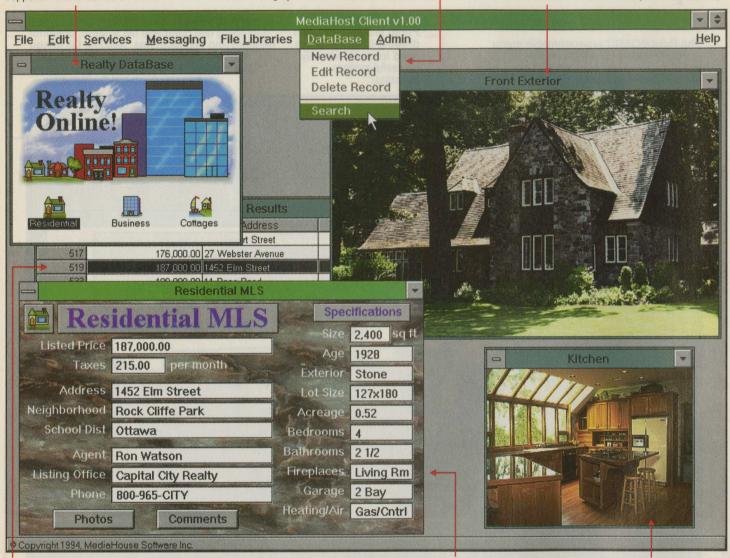
24 bit Photos

Remote Access

Custom database menus are easily created in the MediaHost Designer and Icon Editor. The MediaHost system supports 16 and 256 color icons.

Pulldown menus allow users to quickly perform powerful database queries. Pulldowns can be customized in the MediaHost system to suit your application. The Admin pulldown is only displayed to users having system administrator access.

Images are sent seamlessly in the background using the MediaHost bidirectional protocol leaving users to interact with data already on their desktop.



Databases and querie results are displayed in a spread sheet format which offers quick browsing through records. Like any other window on the desktop, they can be closed or reduced and put out of the way until they are required later in a session.

Custom templates can be created in the MediaHost Designer to display database records. MediaBase will integrate with most database software. You decide what fields in the database your clients can view.

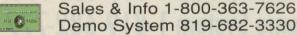
MediaBase offers support for multiple high quality 24 bit images, for each record in the database.

MEDIABASE for Windows





MediaHouse Software Inc. P.O. Box 633, Aylmer, Quebec, J9H 6L1



MediaHost and MediaBase are trademarks of MediaHouse Software Inc. All other trademarks are the property of their respective owners.
© 1994 MediaHouse Software Inc.

ediaBase provides a powerful and natural interface for your online database application. Database queries are displayed in a spread sheet format, just double click on the entries to view photos and information pertaining to that record. A powerful query engine lets your clients quickly find the information they are looking for by definining their search criteria. Photos and data are sent seamlessly in the background while your clients interact with data already on their desktop. Whether you are setting up a Real Estate, Contacts, Tourism, Shopping, Customer support, Inventory or any other type of database across a network or from a remote location MediaBase offers the right interface for your application.

Groupware I I I I A TOST

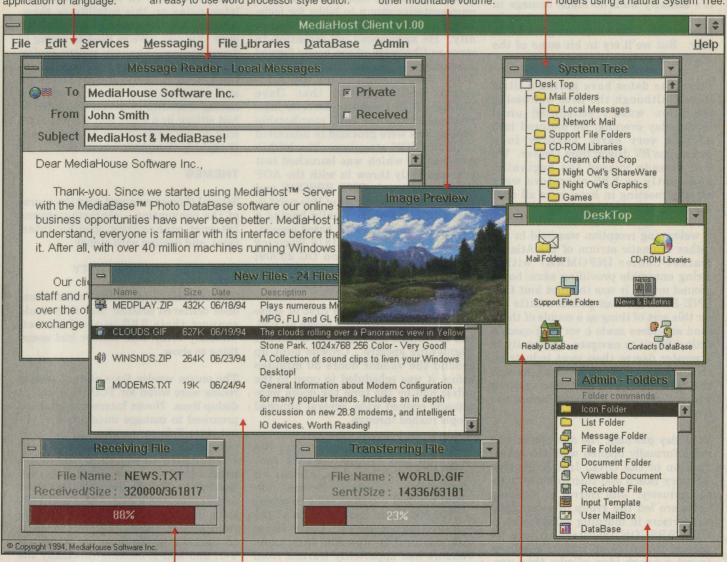
Remote Access Professional Connectivity Software

Pulldown menus are easily customized to suit your application or language.

E-MAIL - Private and public message areas, user mail boxes, and file attachments all in an easy to use word processor style editor.

Users can preview graphic images from CD-ROM, hard drive or any other mountable volume.

Users can quickly navigate between e-mail, file, bulletin and database folders using a natural System Tree.



Upload and download concurrently while maintaining full use of system features such as chat, messaging and files.

File areas support seamless CD-ROM imports and multi-line descriptions. Users can preview graphics and read text files.

Menus, templates and screens can be customized easily to suit your application requirements using the MediaHost Designer and MediaHost Icon Editor.

Drag and drop administration and design whether you are connected locally, on a network or calling from remote.

ediaHost blends e-mail, conferencing, and popular BBS functions together to create an Online System that goes far beyond the capabilities of conventional mail and BBS packages. MediaHost can be accessed equally as well from remote, locally or across a network allowing you to use it for internal mail, workgroup communication, resource sharing or as a dial-in system. MediaHost uses an advanced bidirectional packet protocol for it's multi-tasking Client/Server that allows users to fully interact with the system and conference with other users concurrently.

Online services with

- E-Mail
- Conferencing
- Photo Images
- Video
- File Transfers
- Remote Access
- Network Operation

MediaHost and MediaBase are trademarks of MediaHouse Software Inc. All other trademarks are the property of their respective owners.

© 1994 MediaHouse Software Inc.





MediaHouse Software Inc. PO Box 633, Aylmer Quebec, J9H 6L1

ONE BBSCON ATLANTA YOU HAD TO BE THERE

The Online Networking Exposition and BBS Convention did in fact occur at the predicted time, August 17-21, at the predicted city, Atlanta Georgia - apparently for about 4,000 paying online communications aficionados. The industry developed sufficiently during these four days that it's unlikely we'll do much damage in trying to cover it in one article in Boardwatch. Those days are gone we do fear. But we'll try to hit some of the highlights here.

First, the dates have gotten a little loose. Although the first welcoming reception wasn't scheduled until Wednesday evening, we motored into Atlanta very early Tuesday in a monstrous RV driven from Denver. We had already missed the beginning apparently as BBS operators were already meeting in hotel bars all over the immediate downtown area.

A welcoming reception was held in the rather dramatic atrium of the Atlanta Market Center INFOMART with a string ensemble providing some background music. It was the first hint that ONE BBSCON had gotten a little big for this sort of thing as a couple of thousand attendees made a very big space a little difficult to navigate. Apparently to a greater degree than most industries, this one knows about networking and the card swapping and deal making were pretty well underway before the food was really rolled out.

Thursday morning, the convention was more formally opened with the introduction of the ONE, Inc. Executive Advisory Board and their comments on the industry. Jim Harrer of Mustang Software led the group of some 2100 early risers in morning calisthenics, a ONE BBSCON tradition, where he surveys the crowd on various questions to get a rough idea of who they are, what kind of services they operate, and so forth. One of the highlights was a kind of backwards survey of who had first gone online with their BBS in 1994, 1993, 1992, etc. with part of the crowd sitting down as each year rolled back. Ultimately, one was left standing in the spotlight - Ward Christensen, author of CBBS and XMODEM and widely considered the father of the BBS. It was a moving moment.

Phil Becker then unleashed a presentation that included a laser light show using the equivalent equipment and production of most planetariums that actually did leave most of the attendees gasping for air. It ran nearly 30 minutes and provided essentially a "state of the BBS community" summary - but with smoke, mirrors, and lasers to the point that you again had to be there.

He then introduced the keynote speaker, Dennis C. Hayes, of Hayes Microcomputing Products, Inc., who delivered a 45 minute address on the BBS community, and the need for a representative group to lobby for legislation on behalf of the online community. He announced his intention to serve as Chairman of the newly formed Association of Online Professionals or AOP. This announcement was sufficiently well received that Dave McClure, AOP Executive Director later reported that some 1500 membership applications were provided to interested ONE BBSCON attendees. The NOMA Association which was launched last year promptly threw in with the AOP during this year's ONE BBSCON and there seems little barrier at this point to the BBS community finally having a serious, Washington D.C. based association to represent them (1818 Wyoming Avenue NW, Washington DC 20009; (202)265-1266 voice; (202)265-7308 fax; Internet 70631.266@compuserve.com)

Thursday afternoon, the first of some 172 educational seminars began at 1:30, and the vendor floor opened - an almost frightening spectre. Crowds built up around the vendor doors 30 minutes before it was scheduled to open to the public and by the time the doors were actually opened wide, several hundred people rushed through.

Some 150 vendors displayed at the event on the 100,000 square foot INFORUM exhibit area, almost all offering show discounts. Several individual vendors reported sales in excess of \$100,000 out of their booths over the course of the convention. Booth design was noticeably upscale this year. Vendors had apparently learned from the two previous ONE BBSCON's and brought some very attractive designs to the show. The result was a floor that looked very much like COMDEX with an attitude.

Planet Connect has done well with their satellite delivery of data services such as USENET Newsgroups, Fidonet Echomail, Files, Weather info, etc. And they did have a fairly enormous 20X20 booth with a lot of traffic from those wanting to make the sky-side connection. But in recent months, they've started a kind of grass roots television network delivered by satellite as well.

Joe Overholt and Johnny Green do about an hour on BBSs and online services each month. And according to Overholt, they've actually had to start mailing videocassettes out in a kind of subscription service for it due to the demand from operators who don't even have the satellite service. So at the show, they also had set up a lit interview stage, a tv control room, and were grabbing people out of the aisles to interview them on various topics for later airing on this satellite tv show. And you've just never seen television done this way. We're used to seeing tv done "seriously" by very serious professionals who are very "serious" about their work. Clearly, Green, Overholt, and everyone they interviewed were having more fun than can otherwise be had sitting in a chair and we just can't wait to see what shows up on the air. Everybody thought it was a hoot.

THEMES

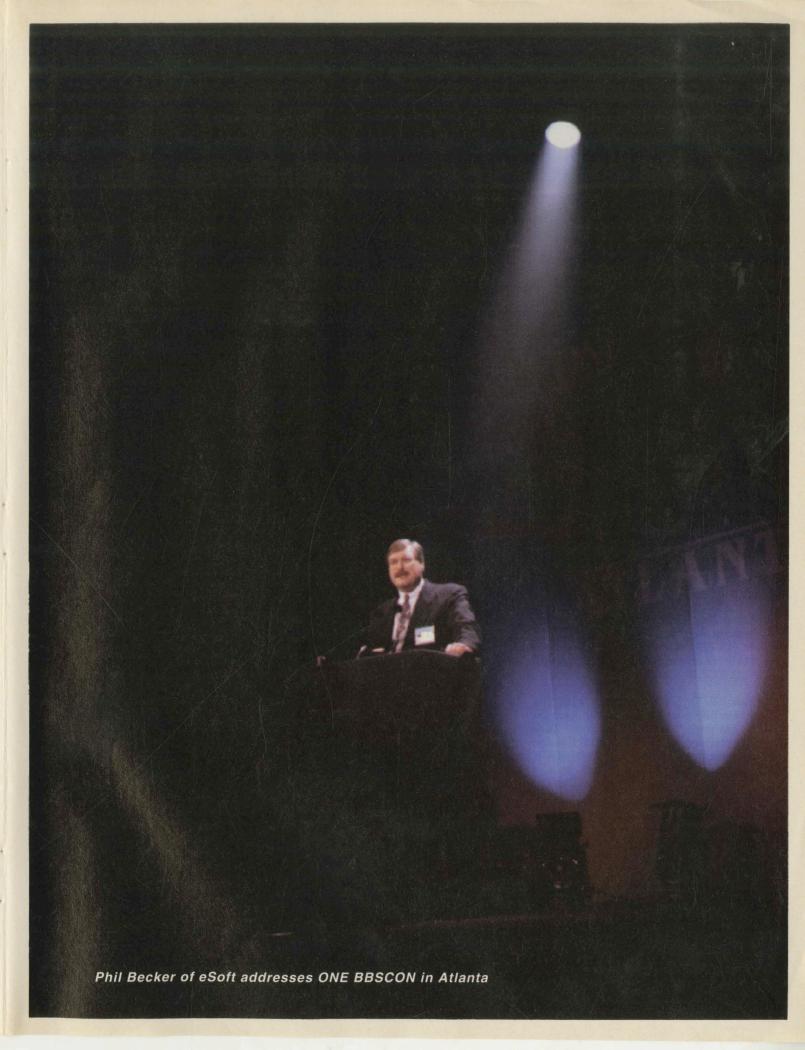
Several themes emerged over the course of the convention - centering around Internet connectivity, graphic interfaces, and dealing with money.

INTERNET CONNECTIVITY

The overriding interest of most attendees centered around how they could connect their BBS to the Internet. Virtually every BBS vendor had something to show.

The entire vendor floor and all session rooms were wired for TCP/IP as well as dialup lines. Novex Interserve, who had promised to manage installation of the net since February and continued to do so right up until ONE WEEK before the show, called to say they just didn't believe they would be coming after all. But Sprint, Phil Becker, J.P. McMillan, Jeff Phillips and a couple of other handy souls literally rolled a TCP/IP network from scratch the day before the show, connected it to the Sprint backbone via T-1, and had it cooking flawlessly the entire event. A bank of twenty PCs were provided on the convention level with both dialup access, using modems contributed by Supra, Hayes, U.S. Robotics, and Practical Peripherals, and TCP/IP and were a big hit with attendees. Attendees were encouraged to direct dial any BBS in the world as they wished. Six 36-inch color monitors allowed other conventioneers to view the various bulletin boards accessed. And many attendees used this facility to check on systems back home, check their e-mail, etc.

Brad Clements of Murkworks was showing their series of Novell Netware





Loadable Modules for telnet, ftp, smtp, gopher, and more that work with any LANable BBS that supports a fossil driver interface. PCBoard, Wildcat, and Searchlight BBS operators crowded this display with some enthusiasm.

Dave Hughes, both the Sr. and Jr. version were there with the author of LORA BBS, who came all the way from Italy, demonstrating LORA on OS/2 with TCP/IP access.

Russell Frye was on hand with the PowerBBS package which was designed to run under Microsoft Windows. They had artfully plugged PowerBBS into the shareware Trumpet WINSOCK allowing BBS callers access to the Internet, and Internauts access to the BBS

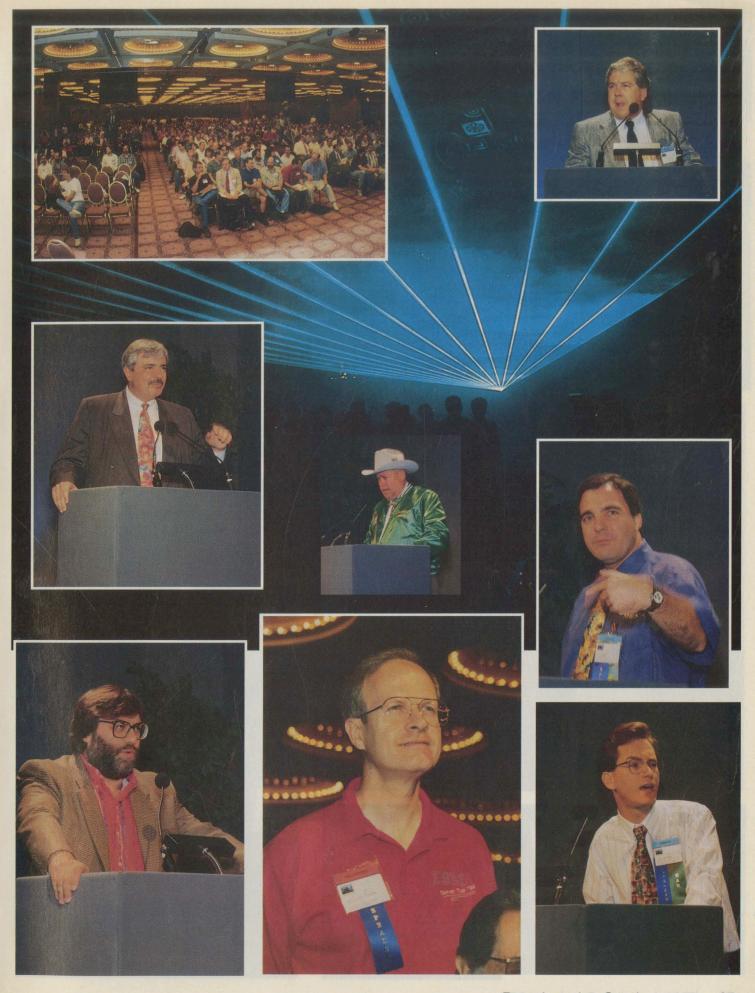
A new BBS package, TSX BBS claimed multiline support and TCP/IP connectivity and stirred a bit of interest - message base looked very amenable to newsgroups and e-mail.

Galacticomm showed their Internet Connectivity Option which incorporates a TCP/IP stack right on the BBS platform to measurable enthusiasm from Major BBS operators. Bill McCauley of Lawrence Livermore Labs did a bangup session on how to shop for telephone services such as T-1 and 56 kbps sessions. Mark Graham of Pandora Systems headed up the Internet track and despite several last minute speaker cancellations managed and spoke himself at some of the most heavily attended sessions of the event.

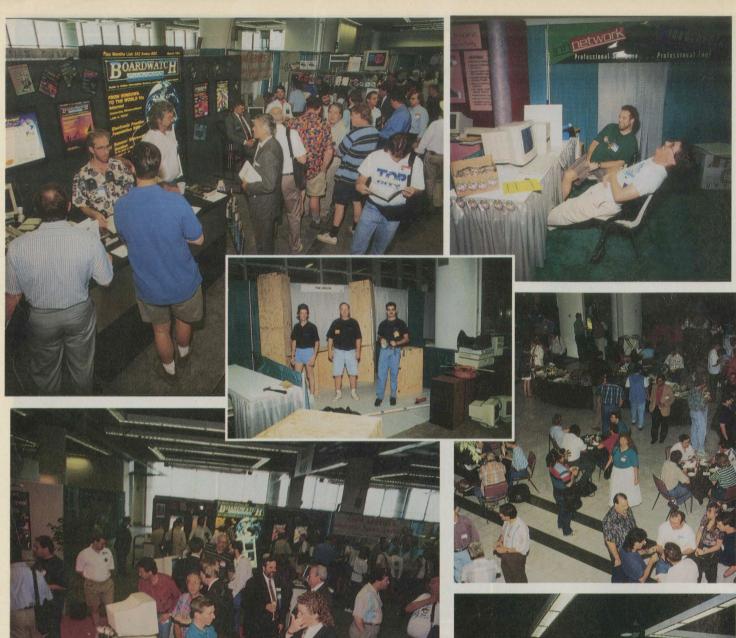
The big event here was Phil Becker's session on eSoft's Internet Protocol Adapter or IPAD. The 90 minute session went beyond the sales pitch level providing a pretty thorough overview of Internet architecture, how things were normally accomplished, the different strategies employed to connect hundreds of BBSs already using terminal adapters, UNIX systems, etc. They then described the selection process used to put the "important" parts of all that in one hardware/software box they call the Internet Protocol Adapter that combines the functions of a Cisco Router, Domain Name Server, FTP server, Telnet server, SMTP server, NNTP server, and more into a complete solution for connecting bulletin boards to the network. The demonstration consisted mostly of TCP/IP connected laptops using Xircom pocket ethernet adapters. And when Alan Bryant telnetted to the eSoft demo

system using Mustang Software's Qmodem, and accessed a RIP graphics database with GIF images that automatically displayed on download, the nearly 500 attendees to this session felt the world change. The session closed to a standing ovation. You will hear more about IPAD in coming months - probably one of the most significant developments at the convention.

The other aspect of Internet connectivity was the early dawning awareness among some of the Internet-centric vendors who ventured to ONE BBSCON for the first time, and indeed seemed unfamiliar at first with BBS capabilities. Sprint provided the actual link for the show, and did have a booth there, but seemed surprised by the interest. NetManage, developers of the very popular Chameleon TCP/IP product, and a Dvorak Award winner at the banquet Saturday evening, displayed their product with IP connectivity from their booth. But many attendees used the demonstration as an opportunity to telnet to THEIR bulletin boards on the network and check their e-mail. The Netmanage guys nearly blew a gasket. "We had no idea this number of bulletin boards were already on the Internet for IP."

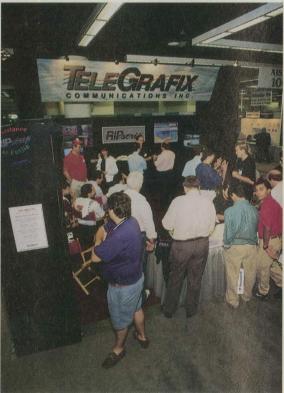


Boardwatch - October 1994 45









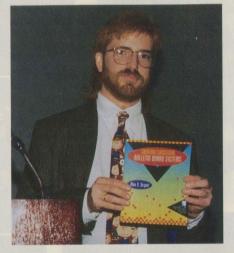


Boardwatch - October 1994 47















Boardwatch - October 1994



Xircom Pocket Ethernet Print Server

by Gary W Funk Gizmologist

Tlike toys. Not the kind you find at Toys HUs, but the kind you find in electronics and computer stores. The kind that don't do much unless you connect them to something, like, another toy. Actually, I like gizmoes and gadgets. This month, I kick off a new column those gizmoes and gadgets that make computing a little more interesting, and I hope, more fun.

Doing a print magazine requires it be printed on paper. And that paper is what you see each month on the newsstand and in your mailbox. What you don't see is the paper that comes out of the HP 4M. Page after page, article after article, revision after revision. With three computers in the art department using that same laser printer, there is a lot of idle time waiting for pages to print.

The need for a second, faster printer was evident and Jack suggested the HP 4SiMX. Since I like to order stuff, I did, and boy is it big. The best part is that it has a 10Base-T ethernet adapter built in and plugs right into our network just like a workstation. This means no parallel cable running from the file server. Now, the art department has a new printer to replace the little HP 4M, and the parallel cable running from the server has to be moved.

Or does it? Sometime in July, a box sent by Xircom arrived that contained a cute little gadget called a Pocket Ethernet Print Server. I opened the box and took it out, looked at it, played with it, read the manual that told me what it does, and placed it on a table. I wasn't sure what was going to be done with it, but I knew it was a good thing to have. It sat there on that table for about four weeks and little did I know just how good it was to have it. I didn't want to move the parallel cable, and there are ethernet jacks in every wall

in the office. This was the moment I was waiting for.

I had a printer, I had a 10Base-T jack, and I had a gadget. All that had to be done was put them all together. This turned out to be the easy part as there are really only three steps. Attach the print server to the printer, run the setup software, and look busy for two hours so the boss thinks you're really good with hardware. Installation, start to finish, actually took less than ten minutes.

The Xircom Pocket Ethernet Print Server IIps supports Novell NetWare versions 2.1x to present, Microsoft LAN Manager, Microsoft Windows NT, and IBM LAN Server. And for Unix, it supports TCP/IP. The IIps connects directly to the printer's parallel port, works with any parallel printer, and transfers data to the printer at speeds up to 600 Kbps. It has both 10Base-2 and 10Base-T and knows which to use, and if it should ever lose the network connection, will automatically reattach to the file server.

Menu-driven setup software makes it a pleasure to install and the step-by-step

instructions are easy to follow. Two LEDs provide basic indications as to the operation of the IIps. Software upgrades to the firmware are quick and easy through the use of Flash memory. The package includes the IIps, AC power adapter, BNC T Connector (for 10Base-2), User's Guide, registration card, and two 3.5-inch setup disks.

This is not just an ethernet LAN adapter, but actually contains software to act as a print server through the file server. This eliminates the need to run pserver.nlm on the file server.

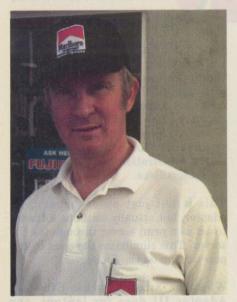
What the Xircom Pocket Ethernet Adapter III does for laptops, the Xircom Pocket Ethernet Print Server IIps does for printers. With the IIps, you can place a shared printer anywhere on your LAN. At a suggested retail price of \$599 this little gadget is pricey, but is cheaper than most print servers, and connecting a printer to a network has never been easier or, more fun. Xircom Corporate, 26025 Mureau Road, Calabasas, California 91302; (818)878-7600 voice; (818)878-7360 fax; (818)878-7618 BBS; Internet: cs@xircom.com; CompuServe: GO XIRCOM



XIRCOM Pocket Ethernet Print Server II

TECHNOLOGY FRONT

SEEKING THE ULTIMATE GRAPHICS MACHINE



By Jim Thompson Western News Service

If you are going to use photo images in your online system, you will need a powerful computer to prepare and manipulate those images. Sure, that old 286 still has some life in it, but you can forget about using it for any serious imaging applications.

So what do you need? I decided to go on a hunt for the "ultimate graphics computer." Since I wanted to make this as close to real-life as possible, I decided the machine should deliver the best in technology, but still remain in a price range that is reasonable. I also wanted to find a machine that is available "off-the-shelf" not one that would have to be custom built with hard-to-find parts.

I first started looking for this "ultimate" machine, several months ago. At that time, the Pentium-60 machines were the hottest talk in the industry. The performance from these machines is so far superior to the 486, it was clear that this was the processor that would have to form the base platform for my "ultimate."

After searching stacks of literature and scanning all the major computer magazines on the market, it appeared that the Gateway 2000 P5-60 Pentium offered the best in the price/performance derby. I am not saying this was the fastest or best machine, but it did appear to offer the best features for the best relative price. The strong user

support offered by Gateway was another factor in their favor.

I talked with some very pleasant folks at Gateway. After explaining my mission, they agreed to let me use a P5-60 for a limited time so I could complete my review. A couple of months passed before I called again to inquire about the machine. Again, they were most pleasant. This time they said they could send a P5-60 out to me right away or I could wait a couple more weeks and look at the new P5-66 machine.

I'm no fool. I quickly said that I would be willing to wait for the newer and faster machine. When I had not received the machine after about three weeks, I called again. This time, I was told that the very next day, Gateway was announcing their new P5-90 machine. I was asked if I wanted to wait for this even newer model.

I was sure the speed difference would be dramatic between the 66 MHz and 90 MHz machines, so again, I agreed to wait a little longer. This time, I was convinced the wait was well worth it.

Within a few weeks the machine, all three black and white cow-spotted boxes, arrived at my door. I opened the box to find not the P5-90 I had expected, but a new P5-66. Not the fastest of the machines on the market, but certainly powerful enough for a graphics platform.

I pass on this story not because I was

frustrated, but to illustrate just how fast things are changing in the world of computers. The performance envelope is being pushed farther and farther as newer and faster chips are introduced. We have seen the demise of the 8088, the 286 and the 386. With the advent of the Pentium processors, the death of the 486 is now inevitable.

What we are seeing is an entirely new kind of

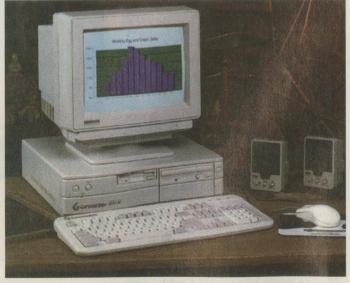
chip. The original 486 ran at 25 MHz, and later 33 MHz both internally and externally as Intel moved the floating-point processor. Chips such as these can no longer compete in the CPU speed derby. The race now belongs to the new multiplier chips. Such chips run at higher speeds internally than they do externally or when communicating with the PC's bus. This has lead to chip doubling, like the 486DX2, and even tripling.

Just last year, the DX2 was about the fastest machine you could find. Today, many find these processors too slow for tasks such as working with large graphics files.

The 90 MHz Pentiums are becoming common. The 100 MHz machines are starting to show-up and the 150 MHz and 200 MHz machines may soon be coming to a computer store near you.

The switch to the faster machines is not only inevitable, but obvious. A DX2/66 machine is about five times faster than a 386/25-MHz and a Pentium 60 is about twice as fast as the DX2/66.

The Gateway P5-66 does offer some impressive performance scores (See BENCHMARKS) and for most graphics work, especially considering the bargains that can be found, this is an excellent choice. However, if you can afford it, I strongly suggest going with a 90 MHz, 100 MHz CPU or even faster, if available. These "second generation" chips are capable of shutting down



Gateway 2000 P5-66

entire areas of the chip, such as the floating-point unit, when not in use.

You should also look for a PCI local bus design which significantly raises throughput levels. PCI (which stands for Peripheral Component Interconnect) local bus was designed for the Pentium and supports a 64-bit data path.

The VL-Bus provides throughputs of up to 267-MBps at a speed of 50 MHz while the newer PCI can push data at up to 264 MBps at 33 MHz. Compare this to the old ISA bus which provides a maximum performance of only 8 MBps while running at only 8 MHz. Even the EISA can only deliver a throughput of up to 33 MBps.

The Gateway has a PCI local bus design on all its Pentium equipped machines. The 66 MHz comes standard with 8MB of RAM, but, for graphics work you will definitely need more. The machine I looked at was loaded with 32MB of RAM. Of course, you could get-by with less memory, but there is really no percentage.

When working with graphics, the "ruleof-thumb" is that the memory should be at least three times larger than the image you will be working with. So, a 5MB image will require at least 16MB of RAM. With 32MB you can work with a 5MB file under Windows and still have several other applications loaded at the same time. Also, remember that programs are not getting smaller and operating systems (like Windows/NT) are so bloated with "extras" that it takes a shoehorn to install them onto most machines. Additionally, you will need to use some of this memory for software cache.

Still, if price is a major concern, 16MB will do the job. The Gateway also includes 256KB of write-back external processor cache. This provides a noticeable increase in speed, but I would suggest doubling this amount. With 512KB of cache you will not likely be slowed down with data processing bottlenecks.

The next most important element in our "ultimate" machine is the hard disk. This is where the Gateway P5-66 lacks. It comes standard with a 520MB IDE hard drive (See BENCHMARKS for performance). While this is an excellent drive and works well with the overall system, I would suggest a larger, SCSI drive.

In most single-user environments running Windows under DOS, an enhanced IDE drive will actually provide

В	ENC	СНМ	A R	K S	and also	ho tobum	es ad bis
SYSTEMS	Handbook 486SX-25	HandBook 486DX2-40	HandBook 486DX2-50	ColorBook 486SX-33	ColorBook 486DX2-40		ColorBook 486DX4-75
ZDLabs PC Bench	Version 8.0			anona	oilgan bea	ale for m	upobe (ili
DOSMark	2400	26374	337.54	347.31	334.58	397.98	44.77
Processor Harmonic	16.98	19.80	25.37	23.02	20.79	25.94	30.14
Video Harmonic	710.59	195.76	726.77	1246.66	1783.31	1906.53	1912.32
Disk Harmonic	521.00	547.00	815.00	710.00	654.00	705.00	781.00
Coretest	that best	e rigiri s				0000	HBUJON
64K	777.20	801.60	1076.50	973.00	774.50	1081.70	1255.50
32K	653.50	998.20	1087.30	1399.50	926.20	1461.70	1462.00
Power Meter 1.8	MODE TO	Contract		BATUTAS	idenine.	apraca i	mase gr
Sieve Test	0.20	0.20	0.10	0.10	0.10	0.10	0.10
Whetstones	146.90	3873.00	4874.70	197.30	5047.00	5047.00	6988.20
Dhrystones	14.20	17.50	25.00	19.10	25.00	25.00	29.70

better performance than a SCSI drive. But the trend is to what eventually will be a SCSI standard. A SCSI drive provides much larger capacities along with excellent performance. A SCSI-2 drive with approximately 2MB of cache will push data speeds to the maximum. The SCSI interface will also allow you to attach up to seven devices, such as a CD ROM drive and a tape drive, to your system.

8.10

MIPSTest

10.00

14.20

10.90

Next comes the video card and display. The Gateway comes standard with a 24-bit PCI local bus video adapter with 2-MB of RAM which will provide excellent performance for most applications. For high end performance, I suggest the optional Diamond Viper VLB Video card with 2-MB of VRAM. This is one of the fastest cards on the market when it comes to Windows applications.

Specifically designed to take advantage of the 32-bit VESA local-bus architecture, the Viper produces 59-60 million Winmarks by off-loading graphics processing from the computer to the video card. The Viper VLB displays over 16 million colors with a refresh rate of 74Hz at 1280x1024. This is not the best video card on the market, but in the price vs. performance debate, it does provide one of the best deals currently available.

The ultimate card should have a 64-bit graphics accelerator engine. This

provides a 64-bit data path to the VRAM resulting in maximum performance. An on-board 64-bit DAC chip will also improve performance with editing images. A PCI-compatible card can increase overall system performance by as much as 50-percent.

14.20

16.90

11.40

The Gateway comes with a 15-inch Crystal scan monitor. Its flat screen design is much less distorted than standard monitors. Like most manufacturers, Gateway fudges a bit on the actual viewing area of the screen. The 15-inch size actually refers to the size of the tube, not the actual viewing area. The result is that you are really getting about 13-inches of viewing area. For this reason, I suggest popping for the extra bucks and going for at least a 17-inch monitor. Serious users may want to go for a 19 or 20 inch monitor, but remember that this larger monitor is much bigger and heavier.

The Gateway CrystalScan 1572FS is multi-scanning which means it can accept signals from any frequency within its rated bandwidth, proving a great deal of flexibility. It can deliver up to 1024x768 non-interlaced resolution, up to 1280x1024 resolution in interlaced mode with 0.26mm dot pitch.

The Gateway also comes with a Mitsumi double speed CD ROM drive (300 KBps) — a must for loading high-end software packages. The double speed drive should be considered a minimum since 3X, 4X (600 KBps) and even 6X drives are now, or soon will be, available. The Mitsumi is a very acceptable drive and is adequate for most applications.

Included with the Gateway 2000 system is the Anykey Keyboard which allows you to customize any of the 124-keys and to create macros. You will also find Microsoft Windows for Workgroups 3.11, MS-DOS 6.2 and an impressive choice of software options.

CONCLUSIONS

The Gateway 2000 P5-66 offers an excellent compromise between price and performance. Although it does not quite come up to expectations as the ultimate graphics machine, it does offer most of the high-end features needed for working with large graphics files. Gateway is also consistently ranked among the very best when it comes to customer service and support and their prices are among the most competitive when compared to other nationally advertised brands.

The impressive benchmark scores turned in by the 66 MHz machine is a clear indication that the 90 MHz machine is really the machine to have. Since there is only a few hundred dollars difference in price between the 66 and 90 MHz, I strongly suggest going for the faster processor. Add to this at least a 1 GB SCSI hard drive, beef-up the memory to at least 16 MB (32 MB is preferable), add a better video card and you have and excellent system for graphics acquisition and manipulation.

[Jim Thompson is Managing Editor of Western News Service in Los Angeles, California. He also manages the Marlboro Racing News BBS. CompuServe: 72777,2677, MCI Mail: 321-4127, INTERNET: jim.thompson@wnsnews.com]

NOTE: The BENCHMARK test results were provided by Gateway 2000. Independent tests confirmed the accuracy of the results.

CONTACTS:

Gateway 2000 610 Gateway Drive P.O. Box 2000 North Sioux City, SD 57049-2000 Tel: (605) 232-2000 FaxBack: (605) 232-2561 Price: Dependent on configuration

MAIOR NetDoor

- Advanced doors module for the Major BBS™
- Door connections do not use license counts
- High speed LAN connections without serial ports on BBS or door machines
- Run doors on Desqview, OS/2, or stand-alone machines
- No messy cabling

Requires Novell Netware[™] 386 3.11 or 3.12 Uses conventional memory - call for specifications \$525 UNLIMITED USERS



315-265-4717 ext 201 315-268-9812 Fax 315-268-MURK BBS

PO Box 631, Potsdam, NY 13676 info@MurkWorks.com

Get on the INTERNET Now!

- O High Speed Dial-Up Connections at Up to 28.8k Baud
- O Full Internet Support: Telnet, FTP, Archie, Internet Relay Chat, E-mail, Usenet News, Veronica, WIAS, & Gopher
- Over 100,000 Files in 150 Categories. 15,000+ Adult Gifs
- O 6,500+ Usenets and Over 900 Other Echo Message Bases
- O 30 CD-Roms On-line, Multi-Player Games, Live Chat
- O Instant Full Access with a Visa or Master Card
- O Call for More Information and Free Demo of the System
- O Internet callers: We offer full incoming Telnet & Reverse FTP support. Telnet to Jaguar.Anterra.Com

Only from Philadelphia's 22 Gig Monster BBS:

Anterra Network

Modem: (215) 675-3851

Settings: 8-N-1, ANSI or VT-100, Up to 28.8K Baud Anterra, Inc. P.O. Box 253 Hatboro, PA 19040 Voice: (215) 675-4079

No BS with our BBS.

Let's look at the facts: PCBoard has won more awards and is used by more corporations, companies, institutions, agencies and individuals than any other BBS software package world-wide.

"PCBoard is the only commercial BBS software to ever win the coveted PC Magazine Editors Choice Award."

PCBoard has been setting the standard for BBS Software since 1983. No other BBS software gives you this much power, flexibility and ease-of-use right out of the box. Unlike other BBS software packages, with PCBoard there is no need to buy expensive add-on modules to get key features such as an Internet/ UUCP Gateway; a Fido Mailer; QWK Mail Support; Credit Accounting; SysOp Utilities; dBASE File Access; Multi-Channel CHAT: Local/Network and Remote/Dial-In Logins; and support for both Intelligent and Non-Intelligent Multi-Port Hardware with port speeds up to 115,200 bps.



Microsoft Windows, called PCBMail. This native Microsoft Windows E-Mail application is fully integrated with PCBoard, providing a complete solution to your in-house DOS, Windows and OS/2 E-Mail needs.

"The PCBoard Programming Language (PPLC) is this year's winner of the prestigious Dyorak

"The PCBoard Programming Language (PPLC) is this year's winner of the prestigious Dvorak Award for Outstanding PC Telecommunications Technology."

With PCBoard you also get the

PCBoard Mail Manager for

We are here to back you up after the sale with free voice support and software upgrades for the first year AND free technical support via our Customer Support BBS for as long as you run the software.

With our optional PCBoard Programming Language Compiler (PPLC) you can create your own online applications (PPE's) and install them into any display screen, menu or prompt. PPE's may be executed by any PCBoard BBS.



1.800.356.1686

BBS Quith



Compare and Save!

2	Nodes	\$ 150	25	Nodes with PPLC	\$ 550
2	Nodes with PPLC	\$ 200	50	Nodes with PPLC	\$ 750
5	Nodes	\$ 250	100	Nodes with PPLC	\$ 950
5	Nodes with PPLC	\$ 300	250	Nodes with PPLC	\$ 2,000
10	Nodes	\$ 350	1000	Nodes with PPLC	\$ 7,000
10	Nodes with PPLC	\$ 400	1000+	Nodes with PPLC	\$ CALL

Clark Development Company, Inc. 3950 South 700 East, Suite 303, Murray, Utah 84107-2173 Telephone: 801.261.1686 • Fax: 801.261.8987 • BBS: 801.261.8976 • E-Mail: info@clarkdev.com

PEOPLE ONLINE

WHEN YOUR MODEM GETS THE MESSAGE "NO ONE'S HOME."



by Phyllis Phlegar

That would you do, if the online service that you belonged to suddenly didn't exist? After months of chatting and exchanging public messages and e-mails, all your online aquaintances were gone. That is exactly what happened to the subscribers of the National Videotext Network, or NVN, when in June, members could no longer log on as usual. There was no notice that the service was shutting down, nothing. One day members tried to log on, and they could not, period. Most people who communicate online don't readily give out home addresses and phone numbers. Many subscribers were completely cut off from their cyber friends.

Within a week, both Prodigy and Delphi had special new areas set up for displaced NVNers who needed a new home and were also looking for their friends. Bulletins that asked, in one way or another, "are you a refugee from NVN...I am looking for <so and so>" also went up on America Online, CompuServe, and GEnie.

NVN's demise affected me too; it meant the possibility of losing touch with a group of Barbie doll collectors known as "The Poodley Seven." The Poodley Seven (of which I am a card carrying member) are "Birdy," "Charla," "Dessy," "HooD," (the final "D" is capitalized), "Hunca," "Mook," and "Rappy."

Wait a minute, Barbie doll collectors? Are these kids, or what? Before you wrinkle up your nose and think this sounds nuts, trust me when I say that there are a lot of grown, capable women who collect Barbie dolls. I confess to being one of them.

Okay, maybe that wasn't the best example. But among the Poodley Seven: a lawyer, a pilot, a manager of a large national chain of software stores, a sales

assistant at one of the country's largest companies, and a nurse. Hunca came up with the idea of the world's first live.

online all-Barbie cotillion, suggesting that we send each other photos of our dolls dressed for a cotillion, along with a gift, for either the Barbie or the owner. Then, we'd open them while live online in a conference room, giving immediate feedback. We loved the idea, and we began to make plans. Somewhere along the line, Mook's love of poodles slipped into the conversation, and to make a long story short, we became the "Poodley Seven."

Plans were going quite well until without notice, NVN was no longer online. I panicked! What about our cotillion? I had Birdy's address, and sent her a letter immediately, suggesting that we try to get back together on GEnie...because I thought at least two of us were already on that service. Birdy called me as soon as she got my snail mail. HooD indeed was on GEnie, and Mook was also on Prodigy, so I was in touch with them within 48 hours. They in turn found everyone else, and in the meantime, I began posting notes to the Barbie collectors that I already knew on GEnie, warning them of the incoming wave of newbies.

In a few days, three of us were on GEnie, and inside of a month, the entire Poodley Seven was back together and the cotillion went on, as scheduled, on Saturday night, August 20th, 1994. "What is a cotillion?" my editor asks. It's an old fashioned dance, usually southern style with the ladies dressed in frilly long gowns with lots of lace, pretty hats and white gloves. The

Poodley Seven, and the "Barbie Gals" of GEnie (that's what I'd nicknamed them), dressed their Barbies, took pictures of them, uploaded some as GIFs, and sent actual pictures via snail mail, and party gifts, just as Hunca had suggested months earlier. While live and in conference, some of us did, indeed, open packages containing pictures and the presents sent between them. It sounds silly, but it was great. Of course, some people cheated and opened up their gifts ahead of time!

I had an idea to surprise the Poodley Seven and went down to my local Salvation Army store. This particular branch of the Salvation Army just happens to have a huge vintage clothing section and some great employees with a sense of humor. We picked out some 60s high

fashion outfits, I whipped out the eye brow pencil, red lipstick, padded bra and transformed myself in something that might pass for Barbie. I even talked my husband into being Ken. Picture Ken and Barbie in their 40s. that's about how we looked.

In the meantime, GEnie suddenly found that one topic called "Barbie Collectors" wasn't enough, and opened a whole new category about Barbies in the Collectibles Roundtable. What used to be a note or two each week, passed between three or four collectors has now grown to some 100 messages posted...every day. (::Squeal:: I am so proud!)

It isn't hard to understand the attraction that grown women (and some men) have about Barbie dolls, especially the original models. She was the first doll of her kind, and there is hardly a woman alive who doesn't remember her first Barbie. She was way ahead of her time, "becoming" an astronaut in 1965. To date, some 775,000,000 Barbies have been sold in over 140 countries. In recognition of the 35th anniversary of Barbie's debut, Mattel has come out with the "35th Anniversary Barbie," looking very similar to that first Barbie. The Poodley Seven refer to this special doll as "the repro."

The Poodley Seven, the original gang on GEnie, and new folks who have joined in, are all over the country, and have been giving each other up to the minute details on what stores have those sought after repros, and how much they are selling for. One locale wants \$50 for a brunette... another \$25. But no one on the board need pay an inflated price, because someone who can get the \$25 dolls will mail it to whoever wants one. Another wonderful advantage of having this national Barbie club is price checking on the vintage Barbies. Vintage Barbies are those with the original haughty, or coy face, with seamless legs, and ponytail, bubble cut, page boy or swirl hair style. Prices can vary by hundreds of dollars, and the few dollars spent each month exchanging prices online more than pays for itself.

The Barbie board is about much more than prices, though...it's a great place for people with a common, enjoyable hobby to just get together and talk about their latest acquisitions, the doll show they attended recently, and how much they still like to "play with" their Barbies. A few people who were not Barbie collectors who were lurking found themselves drawn into the conversation and soon, were out buying the dolls.

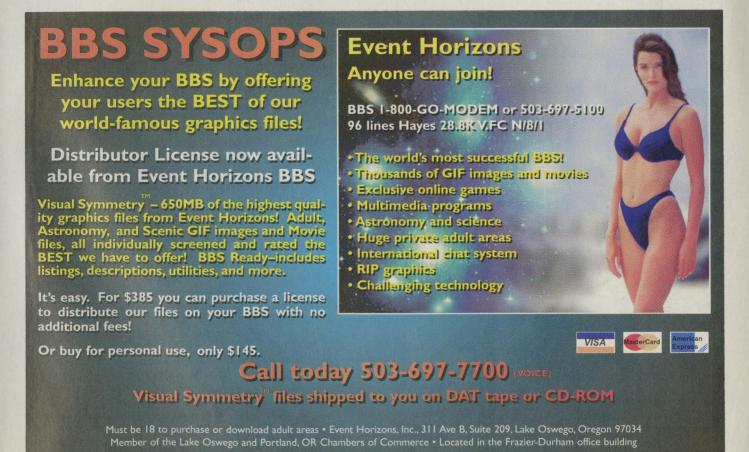
One such new collector's tag line is "I don't collect Barbies, I just buy them."



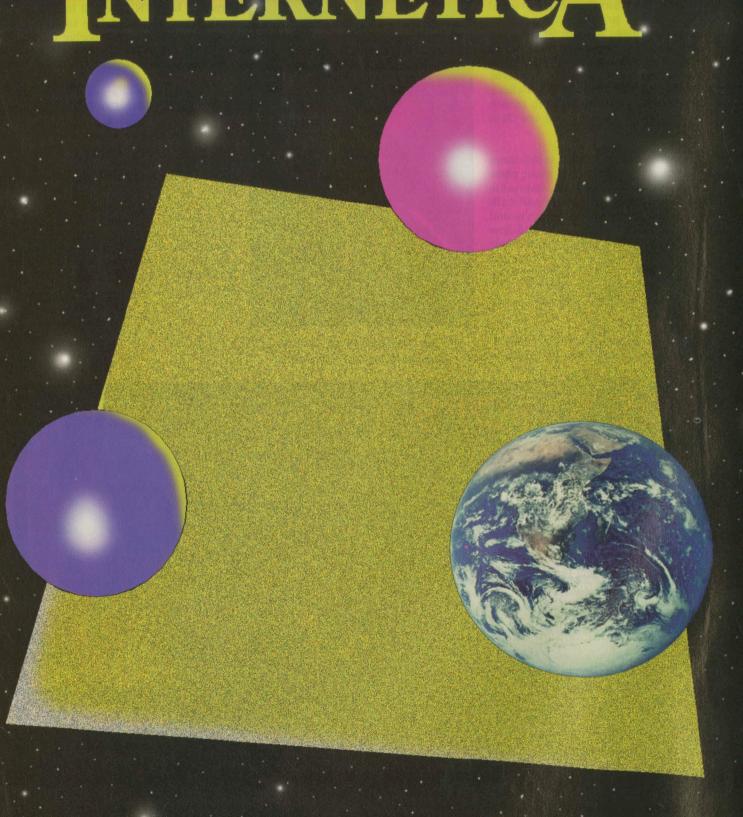
The original 1959 Barbie dressed for the cotillion

In the meantime, the Barbie collectors on GEnie have become a support group for any one of us who may be having a tough time with life in general. During the time that the Poodley Seven were out of touch, we all felt the loss. We were lucky that we reconvened so quickly...some people who were stranded by NVN are still looking for each other. (If you'd like to join the Poodley Seven and the Barbie Gals on GEnie, log onto the Collecting Roundtable and select category 26.)

[Phyllis Phlegar is a graduate of the University of North Carolina at Chapel Hill, and also holds a private pilot's license. In 1974, she was the first female news anchor for the North Carolina News Network, and most recently worked as a weather anchor on Business Radio Network. She's currently a freelance announcer and her work can still be heard on BRN, National Public Radio and the Armed Forces Radio Network. Phyllis is currently working on several writing projects, including those for Boardwatch Magazine, and Addison Wesley Publishing Company.]

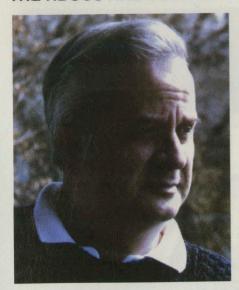


INTERNETICA



INTERNETICA

THE RBOCS ARE COMING!



by Gordon Cook

he RBOCs are coming! If you live in Ohio, Indiana, Illinois, Michigan, or Wisconsin you will soon have very direct experience with an unregulated subsidiary of your local telephone company offering total internet services from corporate leased lines to individual dial up accounts. Ameritech Advanced Data Services Network (AADSnet) is already in the midst of a roll out of a series of services. The result will be the first fruit of the National Science Foundation Director Steve Wolff's strategy of "co-opting the telephone companies" into the Internet. (We refer to Wolff's statement to Joe Stroup of what he has been doing published on the net on August 8.)

Ameritech began to get seriously interested in the Internet in the spring of 1993 hiring COOK Network Consultants in April for an intensive two day seminar on the players, policies and politics. By August 17, 1993 they had offered the National Science Foundation a proposal to run the Chicago Network Access Point (NAP) - a cloverleaf interchange for the new Internet architecture in the view of those who liked what NSF was doing or a choke point for those who were suspicious of NSF's motives. By February 9, 1994 it was clear to both us and Ameritech that they were the winner's of the Chicago NAP.

From Mark Knopper's signature on a February 9, 1994 eight page memo we imply that he was hired in early in the year from his management position at

MERIT to run AADSnet. [Reliable sources say that he has since brought with him more than a dozen others from MERIT — MERIT of course being the state of Michigan network consortium that won the 1987 cooperative agreement to supply a backbone to the National Science Foundation.]

The memo stated that AADSnet "is an IP regional network covering the Ameritech five state area and beyond." "Access methods include frame relay, SMDS, private line (DS0, DS1, DS3, ...) ATM (DS3, OC3, ...), dialup PPP, ISDN basic rate." The memo also stated that AADS has submitted a proposal to the NSF to manage the Chicago NAP. It concludes the "AADSnet will be connected to the Chicago NAP." Under the heading "Routing Plan" it states that "customers are physically connected to an Ameritech 'LATAnet' providing access to the Internet" and "Network Service Providers act as Inter-Exchange carriers to carry IP traffic between the LATAnets. The network provides access in each LATA to multiple Internetwork service providers. AADS customers have their choice of primary and back up long haul providers.'

These last quoted sentences are very critical for Ameritech is still prohibited from doing cross LATA traffic in voice or data. Therefore it needs to involve someone in an IXC function. Some whom we have talked to assume that this means a deal with Sprint and AT&T or MCI. Others are saying that it could mean some kind of arrangement with the regional networks in the area or even with the smaller service providers. It leaves ambiguous whether the NSPs acting as Inter-Exchange carriers are precisely the same as "back up long haul providers." Certainly if Ameritech follows regulatory policy with AADSnet and pays third party cross LATA carriers it is difficult to see how their service could compete effectively with private NSPs. This is a critical area in evaluating the new service and one which receives no further elaboration in Knopper's July 19 memo.

IS AADSNET OR AMERITECH SUBJECT TO ANY REGULATORY CONSTRAINTS?

In a discussion on the Meta Network a source asked us: "Is it your contention that Ameritech (for example) will be selling its own subsidiary (the group that sells shell service) NAP transit

services at a price below what they charge to other access providers? There's something in this industry called imputation, which basically says that if a telephone company is selling both a wholesale and a retail service, the retail price must include an imputed cost equivalent to the wholesale price charged other carriers. In other words, we're not allowed to undercharge our retail customers and overcharge our wholesale customers. Just not allowed."

Taking on the broader question of Ameritech's size and economic muscle being able to allow unfair competition within the general Ameritech service area, a network operator located in their service area told us AADSnet as the unregulated subsidiary would be buying its circuits from Ameritech which would be selling them as a regulated telephone company. He stated he was therefore certain Ameritech could not legally sell AADSnet a leased line any more cheaply than it could to any other commercial competitor.

But the earlier source offered a differing opinion saying "imputation is a regulatory mandate in most cases, and of course AADS is an unregulated subsidiary of Ameritech, so there may not be any legal/regulatory reasons why imputation applies in this case. Of course, if it doesn't, I would suspect that there might be issues of what constitutes unfair competition, etc., but those are even thornier issues."

He added that "Ameritech apparently will be offering dial-up usage sensitive billing accounts for individual users with SLIP/PPP accounts. No mention about inter LATA transport costs. Also, although the blurb says that they will establish local call access to their network 'as local demand warrants,' there is no indication where their POPs will be initially."

"As far as their [Ameritech's] Phase I and Phase II services (PPP and "internet in a box"), I don't see anything there that should worry Karl Denninger or the other providers overly much. My guess is that there will be a relatively low usage level at which our "usage sensitive" pricing becomes less economical than Karl's untimed service. Particularly since Karl has been very aggressive about spotting POPs to permit local calling from much of the Chicago metro area (five open now, and I hear rumors that three more are in the mill)."

Business Beat

Full Text Searching

Need to add powerful full path text searching software to your business BBS? Cheetah is the solution!

Cheetah was designed by APDI, a leader in the BBS service industry. APDI listened to corporations, associations and government agencies who need a simple full text searching software to work with their BBS. From these talks APDI designed and developed Cheetah.

Cheetah enables you to search online for any combination of words in seconds! Cheetah lets your users access large amounts of data quickly and easily.

Cheetah also performs phase and proximity searches. Users can specify word proximity within a paragraph or sentence and the file viewer conveniently highlights all found text.

Unlike other full text searching software, Cheetah was specifically designed for BBSs. Cheetah keeps track of users' time left on the BBS, mode settings, modem status and even allows users to download their search results using any compression software they choose.



Cheetah handles text and images — newsletters, magazines, even government regulations!

Cheetah is available in both serial port and Digiboard versions and works out of the box on Novell networks. Cheetah comes with an unlimited user license per BBS.

New Cheetah 1.5 version now shipping

- Images, GIF files
- Document Date support
- Sysop Configurable menus
- Auto open databases
- Menu-driven maintenance program
- Usage reports
- Unlimited hit lists
- Open multiple databases
- RIP support

Cheetah 1.0 can be purchased at 50% off while supplies last.

So if you work for a corporation, association or government and run a BBS, or just have the task of building one, call APDI at 1-800-785-APDI and find out more about Cheetah's ability to give your users what they need.



Mark Burnett at APDI's BBS Service Bureau

"The BBS Service Bureau"

Companies looking for a serious BBS company to provide a wide range of services are choosing APDI. APDI is devoted to providing professional BBS services to corporations, associations and government agencies throughout the United States.

Typical APDI clients are organizations that need turnkey BBS solutions or advanced technical on-site support. APDI provides installation and support for WildCat!, Galacticomm, PCBoard, TBBS, and Searchlight. APDI is a Certified Mustang Software Integrator (CMSI).

APDI frees up precious time for you and your staff to concentrate on marketing your new BBS.

Most of APDI's corporate customers find it advantageous to let APDI run the BBS for them at APDI's location. APDI provides all equipment (like the BBS center shown above) and handles all technical support and navigation issues on your BBS. APDI's fiber-optic cabling ensures crystal clear connections and communications to your bulletin board system.

Many businesses wish to put a database online but find it difficult to locate programmers with the skills to assist them. APDI has a skilled database development staff and is on the FoxPro and Paradox development teams.

Now APDI puts your BBS on:

- Internet
- X.25 Packet Switched Network

Call and find out why so many of the largest corporations in the world dial into an APDI BBS every day!



/PDI

Application Programming & Development, Inc. 6805 Coolridge Drive, 2nd Floor Camp Springs, MD 20748

1-800-785-APDI

(301) 449-1400 - Voice • (301) 449-6100 - BBS

When Knopper was asked whether imputation would apply to NAP pricing he replied: "for now the services they are offering are rated just by pipe size and shape (Frame Relay vs. SMDS) and there is no issue about whether the customer is an end user or a reseller." He also said that the NAP is "just an ATM system with a small number of customers" and that there wasn't much of an issue of wholesale vs. retail there. We think this sounds like a lot of waffling. We also think that Karl Denninger and Joe Stroup, the implementers of Net-99 will be pretty good at nailing any real waffling that Ameritech engages in.

Consider the following: On August 21 Joe Stroup wrote to the Net-99 list, "Read carefully. Ameritech is dealing in an area that they have 'self declared' to be un-regulated. I do not share that opinion. This is no different than some of the legal battles MCI, Sprint and AT&T have had over a difference of opinion on their business operations. Starting even a small Network is an expensive proposal. Anyone who thinks they can do better will most likely get my support. With that said, AADS needs to be careful about how it runs its business. From the way its gets circuits, hardware, and internal Ameritech support. If I find a sharing or even the smallest hint of the regulated company providing any favors to AADS, I will promise legal action. AADS, if they are really on their own, should be paying the same rates for circuits as Karl and I. No deferred billing, no special install deals, nothing. Right down to the usage of local dialup lines, packet interconnects etc. If they want to enter as a self declared provider and operate unopposed that's fine. Just so they play by the rules.'

THE AADSNET JULY 19 MEMO

It appears that AADS is offering an entire series of internet local loop services and that for these services to get off the ground AADSnet will have to have the cooperation of regular internet service providers against whom AADSnet is competing. Consider the description of phase zero services (July -Sept. 94) available in all 5 LATAs of Michigan, Columbus Dayton and Cleveland Ohio, Milwaukee, Indianapolis and Chicago. "AADSnet Direct IP Connectivity will connect a customer site to the Internet using a Frame Relay or Switched Multimegabit Data Service (SMDS) access at the data link layer. One router for each participating IP-IXC [i.e. competing network service provider] for a LATA will be installed by AADS and located at the AADS switch site to allow routing of IP traffic external to the LATA." Another Ameritech document faxed to us with the July 19 memo states: "a unique feature of Ameritech's Internet Service allows the customer to choose how their traffic is routed to the global Internet by selecting from a variety of Internet Providers. Most regional Internet Providers derive their internet connectivity to the global Internet from one provider and essentially sell that one provider's service. Ameritech has invited all Internet providers to connect to Ameritech's network. Ameritech customers will have the opportunity to choose from a range of providers based upon price and service levels."

There are several unanswered questions in Ameritech's presentation of this "feature." Prices quoted for T-1 SMDS of \$1300 a month and Frame relay of \$1460 seem fairly cheap. What is not clear (as we pointed out above) is whether this includes the trans-LATA costs of agreements with Internet IXCs that are needed to make the AADS services worth paying for in the first place. The answer is almost certainly not because the Ameritech statement that its customers can choose varying levels of Internet IXC service implies varying prices and only single prices are quoted.

PROBLEMS FOR AADSNET OR WATCH OUT FOR THE REST OF US?

So Ameritech customers must add unknown IXC costs which will probably not be much below those quoted for the Ameritech portion of the service. This may well bring the cost up to or beyond that charged by the traditional network service providers. Furthermore we now have Internet service with many points of failure. First the local loop within the LATA. Next the inter LATA IXC routers co-located at uncertain prices in Ameritech pops, and finally the entry of most of the traffic back into the Chicago NAP. AADSnet creates many opportunities for blaming "the other guy" for any break in connectivity. We also wonder how deals will work at the Chicago NAP for those who wish to be AADSnet ICXs. Cooperate with us across LATAs and go through our NAP for free? What of a carrier like Sprint who is sure to be connected to the Chicago NAP for other reasons? Does it pay regular AADSnet interconnect and co-location rates anyway?

Of course if legislation passes the US Congress permitting the RBOCs to offer inter LATA services, this picture changes rapidly and the weakness mentioned above along with any need for AADSnet partnerships with other Internet Service-providers disappears! Then watch out the "elephant's" business plan suddenly becomes much more viable!

TARGET MARKETS

The AADS memo announces that "existing AADS customers who already have IP experience but are not currently connected to the Internet are the primary target for AADSnet [phase 0] services." Phase 1 dial up services will begin September in selected areas. These will be targeted to individual residential users, telecommuters, and 800 number accounts from anywhere in North America. Phase two services (2nd quarter 95) will implement efforts targeted at local civic and government networks, K-12, e-mail to fax gateways and fax to e-mail gateways, and the distribution of an "internet in a box" package to individual users. Phase three services (4th quarter 95) will offer "Online Ameritech Directory services, including white pages and yellow pages." It will feature a "full user friendly information environment for information services and Internet access with community specific interest discussions." Also "virtual town meetings and group conferences over the Internet.'

We imagine Mark Knopper's question box is overflowing. (For his AADSnet service is not the only enterprise under going birthing pains. Even though the NAPs were supposed to be open for business on August 15, we understand he is telling customers that connectivity to the NAP will take eight weeks from the time a customer makes all necessary and binding commitments.) We are sure Ameritech will play by all the rules. Of course while it would be helpful to know just what all the rules are, we surmise that if Ameritech does play by them, it will have a hard time making any money from AADSnet.

[Gordon Cook (cook@path.net) is the Editor/Publisher of the monthly COOK Report on Internet/NREN, a monthly insider's newsletter on the commercialization and privatization of the American Internet. The COOK Report has the most extensive information available on the political deals going down inside the Beltway. It also focuses on emerging new technologies such as cable tv and wireless radio as means of internet access. The COOK Report, 431 Greenway Ave, Ewing, NJ 08618; (609)882-2572 - Editor]

You Don't Get To Be The Biggest BBS In The World Without Paying **Attention To** The Smallest Details.

"Little" details. Like full Internet access at no extra charge, worldwide local access via multiple networks, the world's largest online shareware collection (over a million files plus over 50 CD ROM collections), a horde of online games and information services, one of the largest adult areas in existence, and 280 phone lines - each with its own dedicated CPU. That's what's made Exec-PC the world's biggest BBS. Since 1983, we've logged over 8 million calls, from 50 countries across the globe, and we're still growing! For more information, or to subscribe, call toll-free 1-800-EXECPC-1.

TAKE A FREE TEST DRIVE! v.32 & v.32bis • 414.789.4360 & v.Fast (28.8kbps) • 414.789.4500 2400bps • 414.789.4210 & ISDN and worldwide local access, call for information.



WI 53151

MMB TEAMate UNIX® Internet Information Server

Mosaic

BBS

Gopher

Now Gopher & Mosaic! FIVE Protocols in ONE Server.

• Bulletin Board access via telnet and dialup or with a

TEAMate GUI client for Windows, Mac and UNIX.

• use your TEAMate server to serve HTML data for Mosaic (HTTP) clients

• any Gopher client can now access your server

• support for an electronic mail query and update protocol so your users never have to log in if they don't want to

• a mailing list function so new information from the server can be automatically distributed to specified users via electronic mail

Client/Server Design.

TEAMate's client/server design moves the user interface to the local workstation for increased performance. GUI client software conforming to the established standards for

Windows 3.1, Macintosh and UNIX workstations

makes it easy for your users to get started fast.
Server software is available for HP-UX, IBM RS/6000, SUN and SCO. All servers support terminal emulation and client access via modem and TCP/IP.

Commercial Information Server.

If you need a general purpose information server that is Internet compatible, has all Bulletin Board

functions including full text indexing and user access controls and provides a commercial alternative for Gopher and World Wide Web servers;

MMB TEAMate™

Call (800) 832-6022 or (310) 318-1322 Fax (310) 318-2162 E-Mail bob@teamate.mmb.com
UNIX is a registered trademark of UNIX Systems Laboratories.

904 Manhattan Avenue, Manhattan Beach, CA 90266

Get connected to the:

THE

ICEBOX

MULTI (718) 793-8548 LINE INTERNET: @icelink.com

- INTERNET / USEnet E-Mail
- Gigabytes of Files Online
- NEW Files Daily
- Thousands of Conferences
- Multi-User RPG Games
- Online Multi-User CHAT
- All lines are 28.8 V.FAST!





One call gets it all!™





 Live Internet feed with FTP and Telnet via T1

 Full Usenet feed with 4,000+ newsgroups

- 1,000 International mail conferences from: ILink, Rime, FidoNet, SmartNet, TrekNet, Annex & Internet E-mail
- Hot Adult BBS action with original GIFS, textfiles, massive archive collection, game doors & sizzling network mail from ThrobNet, AdultLinks, AdultNet & AfterDark
- Huge diverse 10 gigabyte file library with daily submissions from the Internet, 30 file distribution networks, original author postings & ASP files

Local Access Telephone Numbers in 350 Cities Call 800/521-2733 for the local DSC number in your area.

V.32bis 14.4 215/443-7390 • HST/DS 215/443-5830
Telnet via Internet: dsc.voicenet.com • ISDN Access Available

CONNECT YOUR BBS TO THE INTERNET!

- Telnet, FTP, Archie, Gopher AND MORE with RIP/ANSI support.
- Integrated Zmodem protocol speeds file transfer.
- Incoming Telnet with forward and reverse FTP file transfer.

- IRC client coming soon, SMTP email and NNTP Netnews available 4Q '94.
- Three versions available: Novell Netware/386, OS/2 v2.11, BSD/386 v1.1.
- Multi-node SLIP/PPP option gives callers SLIP/PPP through your BBS node.*
- Works with almost ALL boards including: Wildcat, The Major BBS, PCBoard, RA, Searchlight, RoboBoard, TurBoard, and any other fossil/door capable boards under DOS, Desgview, or OS/2 (DOS mode). DLL provided for MBBS.
 - * BSD/386 version required

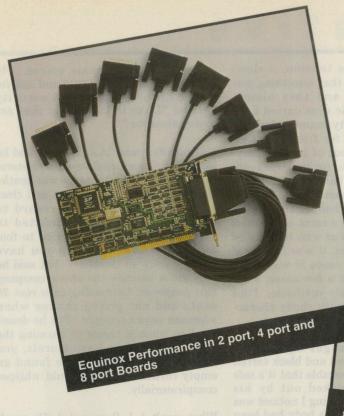
all products are registered trademarks of their respective companies



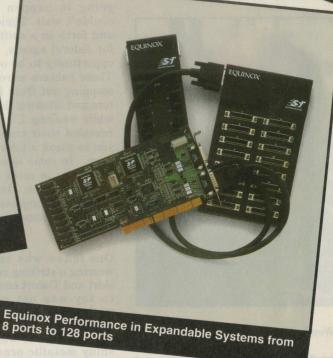
315-265-4717 ext 102 315-268-9812 Fax 315-268-MURK BBS

PO Box 631 Potsdam, NY 13676 info@MurkWorks.com





AT ONE PERFORMANCE PROVEN
WITH THE MAJOR BBS!



Equinox Serial I/O For Your High Performance Multiline BBS.

BBS Performance - It's time to start paying attention...

- V.Fast modems with compression require port speeds of 230K bits/sec.
- Multiline BBS operators are pushing their systems to the limits, driving 64 or more lines from a single CPU.
- BBS developers are fine-tuning their software to maximize speed and number of users.

Equinox leapfrogs the competition with SuperSerial Technology (SST) - our second generation RISC based serial I/O line. EQUINOX SST Multiport Boards and Expandable I/O Subsystems provide the performance needed for today's BBS.

- Unmatched Speed 230K bits/sec. on all ports.
- Extremely low CPU overhead as low as 0.5% CPU utilization per user.
- Super Reliability surge suppression on every pin of every port.
- Flexible Growth expand from 2 to 128 ports in a single slot.

 Over 1,000 ports per system!
- Universal Compatibility ISA, EISA, and Micro Channel.
- Industry-leading 5-year warranty.
- All popular operating systems supported including DOS, UNIX, Novell NetWare Connect and Windows.
- Drivers supplied for DOS (INT 14), FOSSIL and Novell AIO.

Be ready for tomorrow's modems with tomorrow's serial I/O technology. Call EQUINOX today.

1-800-275-3500













LEAP AHEAD!

EQUINOX Systems Inc.

6851 W. Sunrise Boulevard, Ft. Lauderdale, Florida 33313 305-791-5000, FAX 305-791-5001, Internet: info@equinox.com

THE WENDY REPORT: **HACKERS IN VEGAS**



by Wendy Murdock

as Vegas reminds me of the crystalgrowing kits we experimented with in 4th grade science class. There is something beautiful and unnatural about the city — simultaneously repulsive and fascinating. For those very reasons, it seemed fitting that Las Vegas is where Def Con II was held.

Def Con is an annual gathering of hackers, crackers, phreakers and other characters who hang out in the world of the computer underground. This is the second year they have begged, borrowed and perhaps stolen methods of transport to trek their way across the heated wastelands to meet with other geekoids and stay up all night chugging various caffeinated beverages, beer, and thinking of new ways to stir up trouble.

I spent some time wandering around the Sahara hotel looking for convention registration. I knew I was in the right place when I saw a sign that read, "Seminar in Gynecological Laproscopy" with an arrow pointing in the direction of a group of lanky young males dressed in T-shirts and jeans. They all had the rounded-shoulders posture which is the tell-tale indication that they have spent their formative years hunched over a keyboard while their bodies solidified to a mature state.

As people roamed past, the hackers' gazes were inquisitive, mischievous.

There was surface tension, a slowboiling anticipation that something was going to happen and they almost couldn't wait. Their eyes darted back and forth in a shifty manner, looking for federal agents, for friends, for an opportunity to be out of the ordinary. These hackers were, for one weekend, stepping out from behind their monitors and allowing themselves to be seen while wearing I.D. badges that never revealed their true names or allowed you to sneak a peek at who they really were. In some cases, it was irrational paranoia; in most cases it was mere self-importance. In a few cases, I am sure it was completely justifiable; I did run across some pretty shady charac-

One fellow who caught my eye was wearing a striking red and black tartan skirt and T-shirt ensemble that it's safe to say was not picked out by his mother. The second thing I noticed was that various parts of his body had been pierced, out of which were hanging shiny metallic ornaments of various shapes and sizes. He was decked out with multiple electronic doo-dads that would occasionally emit squawking



A.J. Reznor watching Gail Thackeray speak

noises or garbled male voices. He showed me the entire setup and said he was monitoring the hotel security because "I like to know what they are saying about us."

His nametag read "A.J. Reznor" and he looked hardened, eagle-eved and stern. but when he spoke his voice was gentle. He was open about his ideas and clear on where he stood with regard to hacker morality, A.J. admitted to "redboxing" — using a device to fool payphones into thinking you have dropped coins in the slot — but said he only did it because the phone company rips people off by making calls cost 20 cents and not giving change when everyone pays a quarter. But he draws the line when it comes to harming the individual. "I do have morals, you know," he admitted as we found an empty corner where we could whisper conspiratorially.

What won't A.J. Reznor do? He won't dig in a dumpster and snarf your credit card receipts and order \$200 worth of color-coordinated pajamas from L.L. Bean. He won't hack your cellular phone. He is not a petty thief who wants to rip off his fellow man. To him, it's a matter of principle, the common man against The Corporation and The Feds — a battle to be won with technical skill and political subversion.

And that's why A.J. is an electronic nomad. He has a home, but nobody knows where it is. He won't give out his phone number, but will allow you to reach him by pager. He runs a BBS, but does it under an assumed name using the telephone of a friend. He can make phone calls from his truck and communicate via ham radio. This is a man prepared to be on the run, if it comes to that. It certainly gives one something to think about. Previous to the conference, my idea of being prepared was having a roll of breath mints and some wet-wipes in my purse.

I've spent a great deal of time on the fringe of the underground lurking on BBSs where crackers discuss raids to secure access to the superuser account, where phreakers tell how to make thousands of dollars worth of overseas phone calls for free, and where talk inevitably leads to the topic of revenge and sometimes murder. From other parts of the Net I have learned how simple it is to forge electronic mail, to pick locks, and to make napalm from ingredients that I have in my possession right this very minute.

Considering how easy it is to whip up small explosives in one's spare time, wrap them in beautiful shiny paper, tie them with curly ribbon and deliver them to the latest object of one's psychosis, it relieves me to know that most people still retain possession of all their mental faculties and animal impulses.

When I think about the simplicity of physical and virtual terrorism, it's obvious to see why federal agents would be present at Def Con II. Still, most of the people I met at the conference were fresh-faced and eager and would probably do nothing worse than read all the X-rated material on your Unix account or perhaps forge bizarre write messages from God telling you He knows what you do when the lights go out. But you never know who is going to get a Lex Luthor complex and try to blow up a small country — or worse, take over the Net.

So, I'm scanning the room for interesting people when a harried-looking redhead zips past me, franticallly searching for something. She hurries past twice and finally grabs a surprised looking man and starts whispering in his ear, her eyes darting around, settling on me as I look around innocently, pretending not to notice. They shuffle their little huddle over to another man who is standing with his hands shoved deep in his pockets and the redhead begins pointing at someone in the crowd who, by this time, is sitting listening to Phil Zimmerman give a speech on his PGP encryption software. The huddle breaks up and the redhead sits fidgeting in a seat near an outer aisle.

What was all the fuss about? There was a Spot the Fed contest and a victim had been found. Evidently the woman overheard this alleged agent say, "..they've already caught one of our guys..." and that's when she pounced, calling her witnesses together for an impromptu vote on whether they thought this man was a real live Fed. Now, I have to admit, the guy did stand out. When you are in a large group of people, the majority of which are males 18-25 wearing T-shirts and jeans with more rips than fabric, it's sometimes hard to blend. Especially when you are a Polo-shirt-and-loafer-wearing man who is several years past his prime.



Jonathon (left) and Fred (right) displaying the "I am the Fed" T-shirt

The first chance I got, I cornered this alleged Fed. He claimed that his name was Jonathon and he spent much of our chat trying to fob me off onto his sidekick, Fred. Both men denied they were associated with the FBI, but were vague about what they actually do - something to do with computer security. (Did you say national security?) Jonathon looked like the adventureworn Harrison Ford type who could easily hurtle over bench seats in the airport while chasing fleeing criminals. By coincidence, when I asked how he kept in such great shape for a man of his age, he said, "Running through airports with a heavy briefcase." A heavy briefcase. Loaded with heavy sidearms, perhaps. But there were no conspicuous gun-shaped bulges showing under his Polo shirt. This is not to say that he did not have a pocket full of lethal throwing stars or a tiny Derringer strapped to his leg.

Fred was a curiosity as well. He reminded me of Clark Kent. I couldn't see him sitting behind a computer all day. Muscle-bound, tanned with a handsome yet boyish face, Fred wore glasses and looked at any moment as if he might dash into a nearby phone booth and emerge wearing a nifty little Speedo guaranteeing the appraising glance of any woman within half a city block. When I asked him what he did to stay in such top physical form

(enquiring minds want to know) he pointed to Jonathon and said, "Chasing him through airports." It was obvious to me that I wasn't getting enough frequent flyer miles.

Federal agents or not, they were awarded "I am the Fed" T-shirts and the redhead with the keen eye got a shirt that said "I spotted the Fed".

The other bit of government buzz surrounded two men who were rumored to be with the NSA. One, a soft, doughy-looking fellow, loudly denied the accusation in that I-am-really-notwith-the-NSA-but-I'd-like-you-to-think-I-am tone in his voice. He wouldn't tell anyone his name and was mimicing marginally suspicious behavior, but after a bit of snooping I uncovered that he was actually with American Express Corporate Security. The other guy claimed to be with the NSA and that admission immediately made everyone ignore him, because what goofball would actually admit such a thing? A goofball with a clever ruse, I suppose. I think they were both in it for the free T-shirt.

There was a great deal of posing during Def Con. There were hackers pretending to be innocent of wrongdoing. There were lamers (pseudohackers) pretending to be guilty of something. There were federal agents pretending to be businessmen and busi-

nessmen who were Fed-wannabes. It makes me wonder exactly how boring everyone's lives are during the rest of the week. It reminded me of a Charlie Chan movie in which everyone is locked in a room and through the course of events it becomes clear that nobody is who they seem to be.

It's obvious what Def Con was about; it's a part of the frantic quest for Information, this decade's precious commodity. The hackers want it, and the government and corporations don't want them to have it. Knowledge is power, and the men in suits consider forking over information similar to letting your teenage son have the keys to the Porshe while you are gone for the weekend.

Def Con represents the tug-of-war that has always been present — people strive to get that which is just out of reach, aggravating governments and breaking rules in the process. The appeal here is the controversy itself. A hacker's goal is to create a stir, to wreak havoc within the Establishment and half-heartedly attempt to wrestle power from the hands of the few who wield it. Once the goal is achieved, it's time to find a new cause for which to fight.

As I left Def Con, I was weaving my way through the casino crowds and happened to bump into A.J. Reznor who stood out even amid the sequins and neon lights. To me, A.J. represents the dichotomy of the hacker who wants to make his mark on the world, yet retain his precious anonymity.

I turned to wave to him as he walked backwards away from me, grinning manically — an electronic cowboy walking into the garish and unnatural neon sunset and somehow blending in seamlessly. He lifted his hand in a brief salute, then disappeared into the crowd — a trick he and the other hackers are making the habit of a lifetime.

[Wendy Murdock is an artist, writer, and Internet veteran specializing in creative art forms including BBSs and MUDs.]

RESOURCES.

For those of you who love the World-Wide Web, there is a home page devoted to security and hacking. It has links to pages relating to cryptography, general security, upcoming cons and other hacker Web pages and ftp sites. http://dfw.net/~aleph1/

There are numerous scholarly articles on the philosophical, ethical and legal issues regarding the Net. Use gopher to connect to wiretap.spies.com. Once connected choose:

Wiretap Online Library Cyberspace

If you have a more mischievous nature, choose:

Wiretap Online Library Questionables

There you will find articles about ATM codes, how to make alcohol, pick locks, blow things up, burn things to the ground, and commit random and senseless acts of violence.

Zines go really well with the Underground culture. Phrack is an electronic magazine that has been in circulation for eight years, which is a pretty remarkable lifespan for a zine. This publication covers legal and technical issues that relate to the computer underground culture. Use ftp to connect to ftp.eff.org. To find Phrack, look in the following directory: /pub/Publications/CuD/Phrack

Hackers are not stingy with their information as long as they know you are making an effort not to be totally lame. Some folks who hang out on ISCA BBS have put together an interesting FAQ which covers phreaking, social engineering, things that explode, computer virii, forging electronic mail, computer security and general chemical mischief.

You can find TheHaq using ftp at grind.isca.uiowa.edu in /info/computers/hacking/thehaq.txt. Something fun to note: when you switch to the hacking directory, you will be told, "Remember. Illegal entry into a computer system is a crime. This directory is for informational purposes only."

If you feel the nearly irresistible urge to make an incendiary device or something for effective crowd control, check out The Terrorist's Handbook and The Big Book of Mischief. If these don't get you in trouble,

nothing will. Gopher to wiretap.spies.com and make these selections:

Wiretap Online Library Questionables

If you are a spy or other subversive, or if you have a great cookie recipe to hide, get Phil Zimmerman's PGP public encryption software to send your e-mail in code. (And it helps if people know how to read it when it gets to them...) PGP is available via ftp at ftp.uu.net. The directory name is /pub/security/pgp.

When PGP is just not enough, you can take that encrypted cookie recipe and imbed it into something graphical, like a GIF. At this time, only a Mac version is ready, but it looks like someone might be making new software that will work on a PC. Stego allows you to hide your documents within any GIF picture. Use ftp to login at scss3.cl.msu.edu. Your path will be /pub/crypt/other/stego1.0a2.sit.hq.

Bruce Sterling is a well-known science fiction writer who often covers the Cyberpunk genre. He has written a paper called The Hacker Crackdown which is available at gopher.well.sf.ca.us.

From the main menu, select:

Cyberpunk and Postmodern Culture Bruce Sterling The Hacker Crackdown

A great deal of terms are generated in the hacker scene. Some are computer related, some are merely cultural. The Hacker's Dictionary is a handy reference tool when someone says "Feetch feetch!" to you and you need to know what it means. Gopher to crusher.bev.net.

Choose the following menu items:

Reference Desk
Dictionaries and Thesauruses
The Hacker's Dictionary

The Hacker Test is a fun way to measure how much of a hacker you really are. It asks questions like, "Can you whistle 1200 baud?" and "Did you ever forget to mount a scratch monkey?" You can find The Hacker Test by gophering to spinaltap.micro.umn.edu and choosing:

fun Humor Hacker Test

ALABAMA	005 000 4450	
	205 620-4150	
ARIZONA	602 275-1139	
Phoenix	602 331-1112	
	602 790-2500	
ARKANSAS	501 376-7923	
CALIFORNIA		
Agoura	818 348-4035	
Anaheim	714 670-2966 415 856-3685	
Belmont	415 331-1251	
Berkelev	510 839-1917	
Beverly Hills	213 622-1163 714 670-2966	Pompano Bea
Buena Park	714 670-2966	St. Petersburg
Camarillo	805 656-3555	Tarpon Spring

Little Rock CALIFORNIA Agoura Anaheim Belmont Belwodere Beewerly Hills Belwedere Bewerly Hills Brea Camarillo Canoga Park Chico Corte Madera Culver City Cypress El Rio El Segundo Fresno Fresno Fullerton Garden Grove Glendale Hayward Hollywood Inglewood La Jolia La Palma Long Beach Los Angeles Malibu Mill Valley Millbrae Mountain View North Hollywood Norwalk Oakland Oorange Oxnard Pacifica Pacifica Palo Alto Redwood City Reseda Riiverside San Francisco San Pernando San Pernando San Pernando San Fernando	.501 376-7923		
CALIFORNIA	818 348-4035		
Anaheim	714 670-2966		
Belvedere	.415 331-1251		
Berkeley	.510 839-1917	Damana Rooch	107 201 0091
Brea	714 670-2966	Pompano Beach St. Petersburg	813 531-2427
Buena Park Camarillo	.805 656-3555	St. Petersburg Tampa Tarpon Springs W Palm Beach	.813 289-6677 .813 531-2427
Canoga Park	.818 348-4035	W Palm Beach	.407 833-9012
Colton	.909 877-2843	GEORGIA Atlanta	
Compton	.310 633-0184 415 331-1251		
Culver City	.310 410-1207	Norcross Pooler Savannah Tybee Island	.404 952-0325
El Rio	.805 656-3555	Savannah	.912 354-3936
El Segundo	310 410-1207	IDAHO	.912 334-3330
Fullerton	.714 670-2966	Paine	.208 387-1280
Garden Grove	.213 622-1163	ILLINOIS Addison	708 982-0321
Hayward	.510 357-3221	Arlington Heights .	.708 397-5802
Inglewood	.310 410-1207	Barrington Bensenville	.708 397-5802
La Jolla	.619 541-0493 .714 670-2966	Chicago	312 248-0109
Long Beach	.310 633-0184	Elk Grove	.708 397-5802
Los Angeles	.213 622-1163	Elmhurst	.708 982-0321 .708 982-0321
Malibu	.818 348-4035 415 331-1251	Glencoe	.708 982-0321
Millbrae	.415 877-8232	Hawthorn Woods .	.708 397-5802
Moss Beach Mountain View	.415 877-8232	Hoffman Estates .	.708 397-5802
North Hollywood .	.213 622-1163	Morton Grove	.708 982-0321
Oakland	.510 839-1917	Niles	.708 982-0321
Orange	.714 670-2966 .805 656-3555	LILINOIS Addison Arlington Heights Barrington Bensenville Chicago Des Plaines Elik Grove Elmhurst Evanston Glencoe Glenview Hawthorn Woods Hoffman Estates Lake Zurich Morton Grove Mt. Prospect Niles Northbrook Park Ridge Rivergrove Skokie Springfield Wheeling Wilmette Winnetka	.708 982-0321
Pacifica	.415 877-8232	Rivergrove	.708 982-0321
Redwood City	.415 856-3685	Skokie	.708 982-0321
Reseda	.818 348-4035 .415 331-1251	Wheeling	.708 397-5802
Riverside	.909 877-2843	Winnetka	.708 982-0321
San Bernardino	.909 877-2843	INDIANA	217 046 1022
San Carlos	.415 856-3685 619 541-0493	Bloomington	.812 332-5585
San Fernando	.818 348-4035	Boonville	.812 426-0257 .317 846-1032
San Francisco San Jose	.408 946-8561	Chandler	.812 426-0257
San Leandro	.510 357-3221	Elberfeld	.812 426-0257
San Rafael	.415 331-1251	Evansville	.812 426-0257
San Ramon Santa Ana	.510 830-9444	Fort Wayne	.219 422-0021
San Bernardino San Derjos San Diego San Diego San Francisco San Jose San Francisco San Jose San Heardino San Francisco San Jase San Leandro San Hafael San Ramon Santa Monica(N) Santa Monica(S) Santa Paula Saticoy Santa Monica(S) Santa Paula Saticoy Van Nuys Ventura Visalia Walnut Creek Woodland Hills Woodside CANADA	.408 946-8561	Winnetka INDIANA Big Springs Big Springs Bloomington Boonville Carmel Chandler Cumberland Elberleid Evansville Fishers Fort Wayne Fortville Gary Greenfield Greenwood Indianapolis McCordsville McCutchanville McCutchanville McCutchanville McNout Vernon Muncie Nashville Nashville Oaklandon Portage Saint Joseph Saint Philip South Bend Stanford Westfield Whitestown Willow Branch Zionsville IOWA Des Moines	.219 763-6558
Santa Monica(S)	.310 410-1207	Greenfield	.317 846-1032
Santa Paula	.805 656-3555 .805 656-3555	Indianapolis	.317 846-1032
Sausalito	.415 331-1251	Maxwel	.317 846-1032
Van Nuys	.818 348-4035	Mccutchanville	.812 426-0257
Ventura	.805 656-3555	Mount Vernon	.812 426-0257
Walnut Creek	.510 943-1710	Muncie	.317 286-8716
Woodside	.415 856-3685	New Harmony	.812 426-0257
CANADA	740.040.0570	Newburgh	.317 846-1032
Toronto	.716 242-6570	Oaklandon	.317 846-1032
Colorado Springs	.719 520-0026	Saint Joseph	.812 426-0257
		South Bend	.219 232-3811
CONNECTICUT Canton	202 222 4500	Stanford	.812 332-5585
		Whitestown	.317 846-1032
Darien	.203 776-3463	Willow Branch	.317 846-1032
Farmington	203 232-4598	IOWA	
Danioury Darien Darien Fairfield Fairfield Farmington Greenwich Hartford Huntington Millord New Canaan New Haven Newington Old Greenwich Simsbury Stamford Waterbury Washington DELAWARE Newark	.203 232-4598	Des Moines KANSAS	.515 262-0805
Milford	.203 783-1365	Kansas City	.913 492-3790
New Canaan	.203 961-0474	KENTUCKY	606 266-5747
Newington	.203 232-4598	Lexington Louisville	.502 581-1101
Old Greenwich	.203 961-0474	LOUISIANA	
Stamford	.203 961-0474	Baton Rouge New Orleans	.504 834-2711
Washington	.202 393-5568	MARYLAND	202 202 5569
DELAWARE Newark	202 924 1090	Ashton	.410 828-9488
DISTRICT OF CO	UMBIA	Bethesda	.202 393-5568
Washington	.202 393-5568	Laurel	.202 393-5568
FLORIDA Boca Raton	.407 394-0084	Baltimore Bethesda Gaithersburg Laurel Rockville Silver Spring	.202 393-5568
Boca Raton Boynton Beach .	.407 833-9012	MASSACHUSETT	S 500 200 6604
Coral Springs	.407 394-0084	Beverly	.508 777-5664
Deerfield Beach . Delray Beach	.407 394-0084	Boston	.617 332-3200 .508 586-5841
Fort Lauderdale .	.305 733-9604	Danvers	.508 777-5664
Homestead	.305 884-0935	Hamilton	.508 777-5664
Jacksonville	.904 358-9060	Lawrence	508 777-5664
Keystone	.813 531-2427	Lynnfield	.508 777-5664
Oldsmar	813 531-2427	Peabody	.508 777-5664
Boynton Beach Clearwater Coral Springs Deerfield Beach Delray Beach Fort Lauderdale Gainesville Homestead Jacksonville Jupiter Keystone Miami Oldsmar Orlando Perrine	.407 381-8228	MASSACHUSETT Attleboro Beverly Boston Brockton Danvers Framingham Hamilton Lawrence Lowell Lynnfield North Reading Peabody Salem Springfield	.508 777-5664
		-pgilos 11111	

THE BIGGEST BBS CHAT WORLD

• Join 200-300 Users
On-line Nightly for
Public & Private Chat!

• Just \$2/hr. or LESS!

(Special low rates for bold listings)

INSTRUCTIONS

REGULAR LISTINGS

- · Call the number for your city
- At connection, type RETURN twice
- At "Command?" type C PDN and RETURN

BOLD LISTINGS

- · Call the number for your city
- Follow instructions

If you don't have a local

- access number: • Call 1-800-877-5045 (voice)
- Choose option 5, then 1
- · Follow instructions to find your local access number
- · Dial that number

- At connection, type @D then RETURN
- At the TERMINAL= prompt type RETURN
- · At the @ prompt type C PDN and RETURN

SYSOPS: CONNECT Your BBS TO THE **CHATLINK NETWORK**

With the ChatLink software, your BBS can connect in real-time to a huge network of chat-oriented systems from around the world! When linked, your BBS is instantly transformed into a giant online service with hundreds of users to meet and chat with!

ChatLink was designed for use with The Major BBS™ by Galacticomm. If you already run The Major BBS, and want to get connected to ChatLink, use your modem and call (503) 476-6578.

For more information on The Major BBS and their supercharged Entertainment Collection that includes ChatLink, call Galacticomm voice at (305) 583-5990.

♥ GALACTICOMM

ChatLink is a Trademark of OWDS, Inc. • @ 1994 by OWDS, Inc. All Rights Reserved.

Topsfield	.508 777-5664
Worcester	.508 831-7984
Allen Park	.313 271-7073 .313 761-8344
Birmingham	.810 55/-4111
Dearborn Detroit Elk Rapids	.313 271-7073 .313 271-7073
Farmington	.813 2/1-/0/3 .616 935-1978 .810 557-4111 .313 767-4505
	.313 767-4505 .313 767-4505 .616 935-1978 .616 957-0291
Hamiramick	.313 767-4505 .616 935-1978 .616 957-0291 .313 271-7073 .313 271-7073 .616 399-0734
Highland Park Holland Kalamazoo	.616 399-0734 .616 343-1346
Linden	.517 487-2222 .313 767-4505 .810 557-4111 .810 228-2149 .810 557-4111
Mount Clemens Royal Oak	.810 228-2149 .810 557-4111 .810 557-4111
Southfield Suttons Bay Traverse City	.616 935-1978 .616 935-1978
Williamsburg MINNESOTA	.616 935-1978
Minneapolis St. Paul	.612 854-2176 .612 854-2176
MISSISSIPPI Jackson	.601 352-9421
MISSOLIRI	
Florissant Independence Kansas City Saint Louis	.913 492-3790
Saint Louis	.314 842-2732
Omaha NEVADA	.402 345-9524
Las Vegas NEW HAMPSHIRE	.702 733-5834
Manchester	.603 647-3068
NEW JERSEY Atlantic City Bound Brook	.609 645-0018
Bricktown	.908 745-2373 .908 349-0664 .201 778-3492
Franklin Park Hackensack	.908 745-2373
Haddonfield Jersev Citv	.609 866-9835 .201 863-5253
Metuchen	.908 745-2373
Morristown	.609 866-9835 .908 745-2373 .201 623-5087 .201 778-3492
Passaic	
Princeton	.201 994-1192
Toms River Union City	.908 349-0664 .201 863-5253
	.505 294-5675
NORTH CAROLIN	.704 274-0122
Charlotte	.910 370-9371
Charlotte	.919 834-8288
NEW YORK	716 633-7164
Albany	.518 452-5664 .716 546-3060
Buffalo	.718 369-2481 .716 633-7164
Hempstead	
Hopewell Junction Kingston	.914 889-4341
Lancaster	716 633-7164 516 694-0117
Mount Kisco New Paltz	914 241-6790
New York Niagara Falls	716 625-9093
Rhinebeck	914 889-4341
Staatsburg Syracuse	914 889-4341
Tonawanda Wappingers Falls	716 633-7164
Webster	716 546-3060
Winston-Salem NEW YORK Akron Albany Avon Brooklyn Buffalo Fairport Hempstead Hilton Hopewell Junction Kingston Lancaster Melville Mount Kisco Mount Kisco Mount Kisco Mount Kisco Mount Fair New York Niagara Falls Poughkeepsie Rhinebeck Rochester Staatsburg Syracuse Tonawanda Wappingers Falls Webster West Seneca White Plains Williamsville OHIO Akron	716 633-7164
OHIO Akron	216 376-4773
OHIO Akron Carlisle Cincinnati Cleveland Columbus	513 651-4932
Columbus	614 899-0326

Kent	.216 376-4773
Maumee	.216 328-0072 .216 376-4773 .419 536-1673 .419 536-1673
Perrysburg Sylvania	.419 536-1673
Toledo	.419 536-1673 .419 536-1673
Vandalia	.513 298-8512
OKLAHOMA Oklahoma City	.405 631-8457
OREGON	
Eugene	.503 687-1933
Portland	.503 221-0885 .503 581-8158
PENNSYLVANIA	
Allentown	.610 434-7253
Altoona Bellwood	.814 949-9721 .814 949-9721 .610 434-7253 .814 949-9721
Bethlehem	.610 434-7253 .814 949-9721
Cresson Dauphin	.814 949-9721 .717 234-1439
Easton	
Halifax	.610 434-7253 .717 234-1439 .717 883-0128 .717 234-1439 .814 949-9721
Harrisburg	.717 234-1439
Hershey	.717 234-1439
Hollidaysburg Jersey Shore	
Kingston	717 221-0010
Mechanicsburg	717 321-9910 717 234-1439 717 234-1439 717 883-0128 610 434-7253 717 321-9910 412 566-1378
Middletown	717 234-1439
Moosic	.610 434-7253
Oval	.717 321-9910 .412 566-1378
Penn Hills	.215 969-6919
Pittsburg	.412 566-1378
Pittston	.717 883-0128 .610 375-8415
Scranton	.610 375-8415 .717 883-0128 .717 883-0128 .717 321-9910
Taylor	717 883-0128 717 321-9910
Tyrone Wilkes-Barre	
Wilkes-Barre Williamsport	.717 883-0128 .717 321-9910
Wyoming	.717 883-0128
RHODE ISLAND	101 101 000
Providence	401 431-2053
SOUTH CAROLIN	803 779-4461
TENNESSEE	
Apison	615 267-0115
Arlington	901 794-1226
Bristol	615 323-6608 615 323-6608 615 267-0115 615 267-0115
Charleston	615 267-0115
Chattanooga Collierville	901 /94-1220
Dayton	615 267-0115
Dogatur	
Decatur	615 854-9589
Johnson City Knoxville	615 267-0115 615 854-9589 615 689-9973
Johnson City	615 689-9973 901 794-1226 901 794-1226
Decatur Johnson City Knoxville Memphis Millington Nashville	615 689-9973 901 794-1226 901 794-1226
Decatur Johnson City Knoxville Memphis Millington Nashville Rosemark	615 689-9973 901 794-1226 901 794-1226 615 256-1118 901 794-1226
Decatur Johnson City Knoxville Memphis Millington Nashville Rosemark Shelby Forest South Pittsburg	615 689-9973 901 794-1226 901 794-1226 615 256-1118 901 794-1226
Decatur Johnson City Knoxville Memphis Millington Nashville Rosemark Shelby Forest South Pittsburg West Memphis	615 689-99/3 901 794-1226 901 794-1226 615 256-1118 901 794-1226
Decatur Johnson City Knoxville Memphis Millington Nashville Rosemark Shelby Forest South Pittsburg West Memphis TEXAS	615 689-9973 .901 794-1226 .901 794-1226 615 256-1118 .901 794-1226 901 794-1226 901 794-1226
Decatur Johnson City Knoxville Memphis Millington Nashville Rosemark Shelby Forest South Pitsburg West Memphis TEXAS Aldine Aledo	.615 689-9973 .901 794-1226 .901 794-1226 .615 256-1118 .901 794-1226 .615 267-01126 .901 794-1226 .713 623-7920 .817 275-7028
Decatur Johnson City Knoxville Memphis Millington Nashville Rosemark Shelby Forest South Pittsburg West Memphis TEXAS Aldine Aledo Austin	615 689-997. 901 794-1226 901 794-1226 901 794-1226 615 256-1118 901 794-1226 901 794-1226 615 267-0115 901 794-1226 .713 623-7920 .817 275-7028 .512 480-0630
Decatur Johnson City Knoxville Memphis Millington Nashville Rosemark Shelby Forest South Pittsburg West Memphis TEXAS Aldine Aledo Austin	615 689-997. 901 794-1226 901 794-1226 901 794-1226 615 256-1118 901 794-1226 901 794-1226 615 267-0115 901 794-1226 .713 623-7920 .817 275-7028 .512 480-0630
Decatur Johnson City Knoxville Memphis Millington Nashville Rosemark Shelby Forest South Pittsburg West Memphis TEXAS Aldine Aledo Austin Corpus Christi CDS BS CompuBasix	615 689-997. 901 794-1226 901 794-1226 901 794-1226 615 256-1118 901 794-1226 901 794-1226 615 267-0115 901 794-1226 713 623-7920 817 275-7028 512 480-0630 512 887-0787 512 994-8300
Decatur Johnson City Knoxville Memphis Millington Nashville Rosemark Shelby Forest South Pittsburg West Memphis TEXAS Aldine Aledo Austin Corpus Christi CDS BS CompuBasix	615 689-997. 901 794-1226 901 794-1226 901 794-1226 615 256-1118 901 794-1226 901 794-1226 615 267-0115 901 794-1226 713 623-7920 817 275-7028 512 480-0630 512 887-0787 512 994-8300
Decatur Johnson City Knoxville Memphis Millington Nashville Rosemark Shelby Forest South Pittsburg West Memphis TEXAS Aldine Aledo Austin Corpus Christi CDS BS CompuBasix	615 689-997. 901 794-1226 901 794-1226 901 794-1226 615 256-1118 901 794-1226 901 794-1226 615 267-0115 901 794-1226 713 623-7920 817 275-7028 512 480-0630 512 887-0787 512 994-8300
Decatur Johnson City Knoxville Memphis Millington Nashville Rosemark Shelby Forest South Pittsburg West Memphis TEXAS Aldine Aledo Austin Corpus Christi CDS BS CompuBasix	615 689-997. 901 794-1226 901 794-1226 901 794-1226 615 256-1118 901 794-1226 901 794-1226 615 267-0115 901 794-1226 713 623-7920 817 275-7028 512 480-0630 512 887-0787 512 994-8300
Decatur Johnson City Knoxville Memphis Millington Nashville Rosemark Shelby Forest South Pittsburg West Memphis TEXAS Aldine Aledo Austin Corpus Christi CDS BBS CompuBasix Dallas Garbage Dump The Coffee Shop Fort Worth Houston	.615 689-997. 901 794-1226 .901 794-1226 .901 794-1226 .901 794-1226 .901 794-1226 .901 794-1226 .901 794-1226 .713 623-7920 .817 275-7028 .512 887-0787 .512 994-8300 .214 644-6060 .214 369-3579 .817 275-7028 .713 623-7920
Decatur Johnson City Knoxville Memphis Millington Nashville Rosemark Shelby Forest South Pittsburg West Memphis TEXAS Aldine Aledo Austin Corpus Christi CDS BBS CompuBasix Dallas Garbage Dump The Coffee Shop Fort Worth Houston	.615 689-997. 901 794-1226 .901 794-1226 .901 794-1226 .901 794-1226 .901 794-1226 .901 794-1226 .901 794-1226 .713 623-7920 .817 275-7028 .512 887-0787 .512 994-8300 .214 644-6060 .214 369-3579 .817 275-7028 .713 623-7920
Decatur Johnson City Knoxville Memphis Millington Nashville Rosemark Shelby Forest South Pittsburg West Memphis TEXAS Aldine Aledo Austin Corpus Christi CDS BBS CompuBasix Dallas Garbage Dump The Coffee Shop Fort Worth Houston	.615 689-997. 901 794-1226 .901 794-1226 .901 794-1226 .901 794-1226 .901 794-1226 .901 794-1226 .901 794-1226 .713 623-7920 .817 275-7028 .512 887-0787 .512 994-8300 .214 644-6060 .214 369-3579 .817 275-7028 .713 623-7920
Decatur Johnson City Knoxville Memphis Millington Nashville Rosemark Shelby Forest South Pittsburg West Memphis TEXAS Aldine Aledo Austin Corpus Christi CDS BBS CompuBasix Dallas Garbage Dump The Coffee Shop Fort Worth Houston	615 689-997. 901 794-1226 901 794-1226 901 794-1226 615 256-1118 901 794-1226 901 794-1226 615 267-0115 901 794-1226 817 275-7028 817 275-7028 512 480-0630 214 634-6060 214 369-3579 214 630-0242 214 630-0242 214 630-0242 214 630-0242 214 630-0242 214 630-0242 214 630-0242
Decatur Johnson City Knoxville Memphis Millington Nashville Rosemark Shelby Forest South Pittsburg West Memphis TEXAS Aldine Aledo Austin Corpus Christi CDS BBS CompuBasix Dallas Garbage Dump The Coffee Shop Fort Worth Houston Mesquite Pereland Plano Richardson San Antonio UTAH Salt Lake City	.615 689-997. 901 794-1226 901 794-1226 901 794-1226 615 256-1118 .901 794-1226 .615 267-0115 .901 794-1226 .615 267-0115 .901 794-1226 .512 480-0630 .512 887-0787 .512 994-8300 .214 634-6060 .214 369-3579 .817 275-7028
Decatur Johnson City Knoxville Memphis Millington Nashville Rosemark Shelby Forest South Pittsburg West Memphis TEXAS Aldine Aledo Austin Corpus Christi CDS BBS CompuBasix Dallas Garbage Dump The Coffee Shop Fort Worth Houston Mesquite Pereland Plano Richardson San Antonio UTAH Salt Lake City	.615 689-997. 901 794-1226 901 794-1226 901 794-1226 615 256-1118 .901 794-1226 .615 267-0115 .901 794-1226 .615 267-0115 .901 794-1226 .512 480-0630 .512 887-0787 .512 994-8300 .214 634-6060 .214 369-3579 .817 275-7028
Decatur Johnson City Knoxville Memphis Millington Nashville Rosemark Shelby Forest South Pittsburg West Memphis TEXAS Aldine Aledo Austin Corpus Christi CDS BBS CompuBasix Dallas Garbage Dump The Coffee Shop Fort Worth Houston Mesquite Pereland Plano Richardson San Antonio UTAH Salt Lake City	.615 689-997. 901 794-1226 901 794-1226 901 794-1226 615 256-1118 .901 794-1226 .615 267-0115 .901 794-1226 .615 267-0115 .901 794-1226 .512 480-0630 .512 887-0787 .512 994-8300 .214 634-6060 .214 369-3579 .817 275-7028
Decatur Johnson City Knoxville Memphis Millington Nashville Rosemark Shelby Forest South Pittsburg West Memphis TEXAS Aldine Aledo Austin Corpus Christi CDS BBS CompuBasix Dallas Garbage Dump The Coffee Shop Fort Worth Houston Mesquite Pereland Plano Richardson San Antonio UTAH Salt Lake City	.615 689-997. 901 794-1226 901 794-1226 901 794-1226 615 256-1118 .901 794-1226 .615 267-0115 .901 794-1226 .615 267-0115 .901 794-1226 .512 480-0630 .512 887-0787 .512 994-8300 .214 634-6060 .214 369-3579 .817 275-7028
Decatur Johnson City Knoxville Memphis Millington Nashville Rosemark Shelby Forest South Pittsburg West Memphis TEXAS Aldine Aledo Austin Corpus Christi CDS BBS CompuBasix Dallas Garbage Dump The Coffee Shop Fort Worth Houston Mesquite Pereland Plano Richardson San Antonio UTAH Salt Lake City	.615 689-997. 901 794-1226 901 794-1226 901 794-1226 615 256-1118 .901 794-1226 .615 267-0115 .901 794-1226 .615 267-0115 .901 794-1226 .512 480-0630 .512 887-0787 .512 994-8300 .214 634-6060 .214 369-3579 .817 275-7028
Decatur Johnson City Knoxville Memphis Millington Nashville Rosemark Shelby Forest South Pittsburg West Memphis TEXAS Aldine Aledo Austin Corpus Christi CDS BBS CompuBasix Dallas Garbage Dump The Coffee Shop Fort Worth Houston Mesquite Pereland Plano Richardson San Antonio UTAH Salt Lake City	.615 689-997. 901 794-1226 901 794-1226 901 794-1226 615 256-1118 .901 794-1226 .615 267-0115 .901 794-1226 .615 267-0115 .901 794-1226 .512 480-0630 .512 887-0787 .512 994-8300 .214 634-6060 .214 369-3579 .817 275-7028
Decatur Johnson City Knoxville Memphis Millington Nashville Rosemark Shelby Forest South Pittsburg West Memphis TEXAS Aldine Aledo Austin Corpus Christi CDS BBS CompuBasix Dallas Garbage Dump The Coffee Shop Fort Worth Houston Mesquite Pereland Plano Richardson San Antonio UTAH Salt Lake City	.615 689-997. 901 794-1226 901 794-1226 901 794-1226 615 256-1118 .901 794-1226 .615 267-0115 .901 794-1226 .615 267-0115 .901 794-1226 .512 480-0630 .512 887-0787 .512 994-8300 .214 634-6060 .214 369-3579 .817 275-7028
Decatur Johnson City Knoxville Memphis Millington Nashville Rosemark Shelby Forest South Pittsburg West Memphis TEXAS Aldine Aledo Austin Corpus Christi CDS BBS CompuBasix Dallas Garbage Dump The Coffee Shop Fort Worth Houston Mesquite Pereland Plano Richardson San Antonio UTAH Salt Lake City	.615 689-997. 901 794-1226 901 794-1226 901 794-1226 615 256-1118 .901 794-1226 .615 267-0115 .901 794-1226 .615 267-0115 .901 794-1226 .512 480-0630 .512 887-0787 .512 994-8300 .214 634-6060 .214 369-3579 .817 275-7028
Decatur Johnson City Knoxville Memphis Millington Nashville Rosemark Shelby Forest South Pittsburg West Memphis TEXAS Aldine Aledo Austin Corpus Christi CDS BBS CompuBasix Dallas Garbage Dump The Coffee Shop Fort Worth Houston Mesquite Pereland Plano Richardson San Antonio UTAH Salt Lake City	.615 689-997. 901 794-1226 901 794-1226 901 794-1226 615 256-1118 .901 794-1226 .615 267-0115 .901 794-1226 .615 267-0115 .901 794-1226 .512 480-0630 .512 887-0787 .512 994-8300 .214 634-6060 .214 369-3579 .817 275-7028
Decatur Johnson City Knoxville Memphis Millington Nashville Rosemark Shelby Forest South Pittsburg West Memphis TEXAS Aldine Aledo Austin Corpus Christi CDS BBS CompuBasix Dallas Garbage Dump The Coffee Shop Fort Worth Houston Mesquite Pereland Plano Richardson San Antonio UTAH Salt Lake City	.615 689-997. 901 794-1226 901 794-1226 901 794-1226 615 256-1118 .901 794-1226 .615 267-0115 .901 794-1226 .615 267-0115 .901 794-1226 .512 480-0630 .512 887-0787 .512 994-8300 .214 634-6060 .214 369-3579 .817 275-7028
Decatur Johnson City Knoxville Memphis Millington Nashville Rosemark Shelby Forest South Pittsburg West Memphis TEXAS Aldine Aledo Austin Corpus Christi CDS BBS CompuBasix Dallas Garbage Dump The Coffee Shop Fort Worth Houston Mesquite Pereland Plano Richardson San Antonio UTAH Salt Lake City	.615 689-997. 901 794-1226 901 794-1226 901 794-1226 615 256-1118 .901 794-1226 .615 267-0115 .901 794-1226 .615 267-0115 .901 794-1226 .512 480-0630 .512 887-0787 .512 994-8300 .214 634-6060 .214 369-3579 .817 275-7028
Decatur Johnson City Knoxville Memphis Millington Nashville Rosemark Shelby Forest South Pittsburg West Memphis TEXAS Aldine Aledo Austin Corpus Christi CDS BBS CompuBasix Dallas Garbage Dump The Coffee Shop Fort Worth Houston Mesquite Pereland Plano Richardson San Antonio UTAH Salt Lake City VIRGINIA Alexandria Arlington Ashland Chesapeake Chester Fairfax-Vienna Falls Church Herndon Highland Springs Manakin Midlothian Norfolk Portsmouth Richmond Virginia Beach	.615 689-97.2 901 794-1226 901 794-1226 901 794-1226 615 256-1118 901 794-1226 615 267-6118 901 794-1226 615 267-0115 901 794-1226 615 267-0115 901 794-1226 512 480-0630 512 480-0630 512 887-0787 512 994-8300 214 630-3579 817 275-7028 817 275-7028 713 623-7920 214 630-0242 214 630-0242 214 630-0242 214 630-0242 214 630-0242 214 630-0242 214 630-0242 214 630-0242 214 630-0242 214 630-0242 214 630-0242 214 630-0242 214 630-0242 214 630-0242 210 496-2222 801 328-1140 202 393-5568 804 648-2405 804 628-8220 804 648-2405 804 648-2405 804 648-2405 804 648-2405 804 622-8220 804 648-2405 804 648-2405 804 648-2405 804 648-2405 804 648-2405 804 648-2405 804 648-2405
Decatur Johnson City Knoxville Memphis Millington Nashville Rosemark Shelby Forest South Pittsburg West Memphis TEXAS Aldine Aledo Austin Corpus Christi CDS BBS CompuBasix Dallas Garbage Dump The Coffee Shop Fort Worth Houston Mesquite Pereland Plano Richardson San Antonio UTAH Salt Lake City VIRGINIA Alexandria Arlington Ashland Chesapeake Chester Fairfax-Vienna Falls Church Herndon Highland Springs Manakin Midlothian Norfolk Portsmouth Richmond Virginia Beach	.615 689-97.2 901 794-1226 901 794-1226 901 794-1226 615 256-1118 901 794-1226 615 267-6118 901 794-1226 615 267-0115 901 794-1226 615 267-0115 901 794-1226 512 480-0630 512 480-0630 512 887-0787 512 994-8300 214 630-3579 817 275-7028 817 275-7028 713 623-7920 214 630-0242 214 630-0242 214 630-0242 214 630-0242 214 630-0242 214 630-0242 214 630-0242 214 630-0242 214 630-0242 214 630-0242 214 630-0242 214 630-0242 214 630-0242 214 630-0242 210 496-2222 801 328-1140 202 393-5568 804 648-2405 804 628-8220 804 648-2405 804 648-2405 804 648-2405 804 648-2405 804 622-8220 804 648-2405 804 648-2405 804 648-2405 804 648-2405 804 648-2405 804 648-2405 804 648-2405
Decatur Johnson City Knoxville Memphis Millington Nashville Rosemark Shelby Forest South Pittsburg West Memphis TEXAS Aldine Aledo Austin Corpus Christi CDS BBS CompuBasix Dallas Garbage Dump The Coffee Shop Fort Worth Houston Mesquite Pereland Plano Richardson San Antonio UTAH Salt Lake City VIRGINIA Alexandria Arlington Ashland Chesapeake Chester Fairfax-Vienna Falls Church Herndon Highland Springs Manakin Midlothian Norfolk Portsmouth Richmond Virginia Beach	.615 689-97.2 901 794-1226 901 794-1226 901 794-1226 615 256-1118 901 794-1226 615 267-6118 901 794-1226 615 267-0115 901 794-1226 615 267-0115 901 794-1226 512 480-0630 512 480-0630 512 887-0787 512 994-8300 214 630-3579 817 275-7028 817 275-7028 713 623-7920 214 630-0242 214 630-0242 214 630-0242 214 630-0242 214 630-0242 214 630-0242 214 630-0242 214 630-0242 214 630-0242 214 630-0242 214 630-0242 214 630-0242 214 630-0242 214 630-0242 210 496-2222 801 328-1140 202 393-5568 804 648-2405 804 628-8220 804 648-2405 804 648-2405 804 648-2405 804 648-2405 804 622-8220 804 648-2405 804 648-2405 804 648-2405 804 648-2405 804 648-2405 804 648-2405 804 648-2405
Decatur Johnson City Knoxville Memphis Millington Nashville Rosemark Shelby Forest South Pittsburg West Memphis TEXAS Aldine Aledo Austin Corpus Christi CDS BBS CompuBasix Dallas Garbage Dump The Coffee Shop Fort Worth Houston Mesquite Pereland Plano Richardson San Antonio UTAH Salt Lake City VIRGINIA Alexandria Arlington Ashland Chesapeake Chester Fairfax-Vienna Falls Church Herndon Highland Springs Manakin Midlothian Norfolk Portsmouth Richmond Virginia Beach	.615 689-97.2 901 794-1226 901 794-1226 901 794-1226 615 256-1118 901 794-1226 615 267-6118 901 794-1226 615 267-0115 901 794-1226 615 267-0115 901 794-1226 512 480-0630 512 480-0630 512 887-0787 512 994-8300 214 630-3579 817 275-7028 817 275-7028 713 623-7920 214 630-0242 214 630-0242 214 630-0242 214 630-0242 214 630-0242 214 630-0242 214 630-0242 214 630-0242 214 630-0242 214 630-0242 214 630-0242 214 630-0242 214 630-0242 214 630-0242 210 496-2222 801 328-1140 202 393-5568 804 648-2405 804 628-8220 804 648-2405 804 648-2405 804 648-2405 804 648-2405 804 622-8220 804 648-2405 804 648-2405 804 648-2405 804 648-2405 804 648-2405 804 648-2405 804 648-2405
Decatur Johnson City Knoxville Memphis Millington Nashville Rosemark Shelby Forest South Pittsburg West Memphis TEXAS Aldine Aledo Austin Corpus Christi CDS BBS CompuBasix Dallas Garbage Dump The Coffee Shop Fort Worth Houston Mesquite Pereland Plano Richardson San Antonio UTAH Salt Lake City VIRGINIA Alexandria Arlington Ashland Chesapeake Chester Fairfax-Vienna Falls Church Herndon Highland Springs Manakin Midlothian Norfolk Portsmouth Richmond Virginia Beach	.615 689-97.2 901 794-1226 901 794-1226 901 794-1226 615 256-1118 901 794-1226 615 267-6118 901 794-1226 615 267-0115 901 794-1226 615 267-0115 901 794-1226 512 480-0630 512 480-0630 512 887-0787 512 994-8300 214 630-3579 817 275-7028 817 275-7028 713 623-7920 214 630-0242 214 630-0242 214 630-0242 214 630-0242 214 630-0242 214 630-0242 214 630-0242 214 630-0242 214 630-0242 214 630-0242 214 630-0242 214 630-0242 214 630-0242 214 630-0242 210 496-2222 801 328-1140 202 393-5568 804 648-2405 804 628-8220 804 648-2405 804 648-2405 804 648-2405 804 648-2405 804 622-8220 804 648-2405 804 648-2405 804 648-2405 804 648-2405 804 648-2405 804 648-2405 804 648-2405
Decatur Johnson City Knoxville Memphis Millington Nashville Rosemark Shelby Forest South Pittsburg West Memphis TEXAS Aldine Aledo Austin Corpus Christi CDS BBS CompuBasix Dallas Garbage Dump The Coffee Shop Fort Worth Houston Mesquite Pereland Plano Richardson San Antonio UTAH Salt Lake City VIRGINIA Alexandria Arlington Ashland Chesapeake Chester Fairfax-Vienna Falls Church Herndon Highland Springs Manakin Midlothian Norfolk Portsmouth Richmond Virginia Beach	.615 689-97.2 901 794-1226 901 794-1226 901 794-1226 615 256-1118 901 794-1226 615 267-6118 901 794-1226 615 267-0115 901 794-1226 615 267-0115 901 794-1226 512 480-0630 512 480-0630 512 887-0787 512 994-8300 214 630-3579 817 275-7028 817 275-7028 713 623-7920 214 630-0242 214 630-0242 214 630-0242 214 630-0242 214 630-0242 214 630-0242 214 630-0242 214 630-0242 214 630-0242 214 630-0242 214 630-0242 214 630-0242 214 630-0242 214 630-0242 210 496-2222 801 328-1140 202 393-5568 804 648-2405 804 628-8220 804 648-2405 804 648-2405 804 648-2405 804 648-2405 804 622-8220 804 648-2405 804 648-2405 804 648-2405 804 648-2405 804 648-2405 804 648-2405 804 648-2405
Decatur Johnson City Knoxville Memphis Millington Nashville Rosemark Shelby Forest South Pittsburg West Memphis TEXAS Aldine Aledo Austin Corpus Christi CDS BBS CompuBasix Dallas Garbage Dump The Coffee Shop Fort Worth Houston Mesquite Pereland Plano Richardson San Antonio UTAH Salt Lake City VIRGINIA Alexandria Arlington Ashland Chesapeake Chester Fairfax-Vienna Falls Church Herndon Highland Springs Manakin Midlothian Norfolk Portsmouth Richmond Virginia Beach	.615 689-97.2 901 794-1226 901 794-1226 901 794-1226 615 256-1118 901 794-1226 615 267-6118 901 794-1226 615 267-0115 901 794-1226 615 267-0115 901 794-1226 512 480-0630 512 480-0630 512 887-0787 512 994-8300 214 630-3579 817 275-7028 817 275-7028 713 623-7920 214 630-0242 214 630-0242 214 630-0242 214 630-0242 214 630-0242 214 630-0242 214 630-0242 214 630-0242 214 630-0242 214 630-0242 214 630-0242 214 630-0242 214 630-0242 214 630-0242 210 496-2222 801 328-1140 202 393-5568 804 648-2405 804 628-8220 804 648-2405 804 648-2405 804 648-2405 804 648-2405 804 622-8220 804 648-2405 804 648-2405 804 648-2405 804 648-2405 804 648-2405 804 648-2405 804 648-2405
Decatur Johnson City Knoxville Memphis Millington Nashville Rosemark Shelby Forest South Pittsburg West Memphis TEXAS Aldine Aledo Austin Corpus Christi CDS BBS CompuBasix Dallas Garbage Dump The Coffee Shop Fort Worth Houston Mesquite Pereland Plano Richardson San Antonio UTAH Salt Lake City VIRGINIA Alexandria Arlington Ashland Chesapeake Chester Fairfax-Vienna Falls Church Herndon Highland Springs Manakin Midlothian Norfolk Portsmouth Richmond Virginia Beach	.615 689-97.2 901 794-1226 901 794-1226 901 794-1226 615 256-1118 901 794-1226 615 267-6118 901 794-1226 615 267-0115 901 794-1226 615 267-0115 901 794-1226 512 480-0630 512 480-0630 512 887-0787 512 994-8300 214 630-3579 817 275-7028 817 275-7028 713 623-7920 214 630-0242 214 630-0242 214 630-0242 214 630-0242 214 630-0242 214 630-0242 214 630-0242 214 630-0242 214 630-0242 214 630-0242 214 630-0242 214 630-0242 214 630-0242 214 630-0242 210 496-2222 801 328-1140 202 393-5568 804 648-2405 804 628-8220 804 648-2405 804 648-2405 804 648-2405 804 648-2405 804 622-8220 804 648-2405 804 648-2405 804 648-2405 804 648-2405 804 648-2405 804 648-2405 804 648-2405
Decatur Johnson City Knoxville Memphis Millington Nashville Rosemark Shelby Forest South Pittsburg West Memphis TEXAS Aldine Aledo Austin Corpus Christi COS BBS CompuBasix Dallas Garbage Dump The Coffee Shop Fort Worth Houston Mesquile Pereland Piano Richardson San Antonio UTAH Salt Lake City VIRGINIA Alexandria Arlington Ashland Chesapeake Chester Fairfax-Vienna Falls Church Herndon Highland Springs Manakin Midlothian Norfolk Portsmouth Richmond Virginia Beach WASHINGTON Auburn Bellingham Des Moines Kent Olympia Puyallup Renton Richland Seattle Spokane	.615 689-97.2 901 794-1226 901 794-1226 901 794-1226 615 256-1118 901 794-1226 615 267-6118 901 794-1226 615 267-0115 901 794-1226 615 267-0115 901 794-1226 512 480-0630 512 480-0630 512 887-0787 512 994-8300 214 630-3579 817 275-7028 817 275-7028 713 623-7920 214 630-0242 214 630-0242 214 630-0242 214 630-0242 214 630-0242 214 630-0242 214 630-0242 214 630-0242 214 630-0242 214 630-0242 214 630-0242 214 630-0242 214 630-0242 214 630-0242 210 496-2222 801 328-1140 202 393-5568 804 648-2405 804 628-8220 804 648-2405 804 648-2405 804 648-2405 804 648-2405 804 622-8220 804 648-2405 804 648-2405 804 648-2405 804 648-2405 804 648-2405 804 648-2405 804 648-2405
Decatur Johnson City Knoxville Memphis Millington Nashville Rosemark Shelby Forest South Pittsburg West Memphis TEXAS Aldine Aledo Austin Corpus Christi CDS BBS CompuBasix Dallas Garbage Dump The Coffee Shop Fort Worth Houston Mesquite Pereland Plano Richardson San Antonio UTAH Salt Lake City VIRGINIA Alexandria Arlington Ashland Chesapeake Chester Fairfax-Vienna Falls Church Herndon Highland Springs Manakin Midlothian Norfolk Portsmouth Richmond Virginia Beach WASHINGTON Auburn Bellingham Des Moines Kent Olympia Puyallup Renton Richland Seattle Spokane Taccoma	.615 689-97.4 901 794-1226 901 794-1226 901 794-1226 615 256-1118 901 794-1226 615 267-6118 901 794-1226 615 267-0115 901 794-1226 615 267-0115 901 794-1226 615 267-0115 901 794-1226 217 803-7920 214 803-030 214 803-030 214 803-030 214 803-030 214 803-030 214 803-030 214 803-030 214 803-030 214 803-030 214 803-030 214 803-030 214 803-030 214 803-030 214 803-030 214 803-030 214 803-3579 214 803-0324 210 403-0324 210 403-222 210 403-222 210 403-222 210 403-222 210 403-222 210 803-5568 804 804-2405 804 622-8220 804 648-2405 804 628-8220 804 648-2405 804 628-8220 804 648-2405 804 628-8220 804 648-2405 804 628-8220 804 648-2405 804 628-8220 804 648-2405 804 628-8220 804 648-3205 804 648-3205 804 628-8220 804 648-3205 804 648-320
Decatur Johnson City Knoxville Memphis Millington Nashville Rosemark Shelby Forest South Pittsburg West Memphis TEXAS Aldine Aledo Austin Corpus Christi CDS BBS CompuBasix Dallas Garbage Dump The Coffee Shop Fort Worth Houston Mesquite Pereland Plano Richardson San Antonio UTAH Salt Lake City VIRGINIA Alexandria Arlington Ashland Chesapeake Chester Fairfax-Vienna Falls Church Herndon Highland Springs Manakin Midlothian Norfolk Portsmouth Richmond Virginia Beach WASHINGTON Auburn Bellingham Des Moines Kent Olympia Puyallup Renton Richland Seattle Spokane Taccoma	.615 689-97.4 901 794-1226 901 794-1226 901 794-1226 615 256-1118 901 794-1226 615 267-6118 901 794-1226 615 267-0115 901 794-1226 615 267-0115 901 794-1226 615 267-0115 901 794-1226 217 803-7920 214 803-030 214 803-030 214 803-030 214 803-030 214 803-030 214 803-030 214 803-030 214 803-030 214 803-030 214 803-030 214 803-030 214 803-030 214 803-030 214 803-030 214 803-030 214 803-3579 214 803-0324 210 403-0324 210 403-222 210 403-222 210 403-222 210 403-222 210 403-222 210 803-5568 804 804-2405 804 622-8220 804 648-2405 804 628-8220 804 648-2405 804 628-8220 804 648-2405 804 628-8220 804 648-2405 804 628-8220 804 648-2405 804 628-8220 804 648-2405 804 628-8220 804 648-3205 804 648-3205 804 628-8220 804 648-3205 804 648-320
Decatur Johnson City Knoxville Memphis Millington Nashville Rosemark Shelby Forest South Pittsburg West Memphis TEXAS Aldine Aledo Austin Corpus Christi CDS BBS CompuBasix Dallas Garbage Dump The Coffee Shop Fort Worth Houston Mesquite Pereland Plano Richardson San Antonio UTAH Salt Lake City VIRGINIA Alexandria Arlington Ashland Chesapeake Chester Fairfax-Vienna Falls Church Herndon Highland Springs Manakin Midlothian Norfolk Portsmouth Richmond Virginia Beach WASHINGTON Auburn Bellingham Des Moines Kent Olympia Puyallup Renton Richland Seattle Spokane Taccoma	.615 689-97.4 901 794-1226 901 794-1226 901 794-1226 615 256-1118 901 794-1226 615 267-6118 901 794-1226 615 267-0115 901 794-1226 615 267-0115 901 794-1226 615 267-0115 901 794-1226 217 803-7920 214 803-030 214 803-030 214 803-030 214 803-030 214 803-030 214 803-030 214 803-030 214 803-030 214 803-030 214 803-030 214 803-030 214 803-030 214 803-030 214 803-030 214 803-030 214 803-3579 214 803-0324 210 403-0324 210 403-222 210 403-222 210 403-222 210 403-222 210 403-222 210 803-5568 804 804-2405 804 622-8220 804 648-2405 804 628-8220 804 648-2405 804 628-8220 804 648-2405 804 628-8220 804 648-2405 804 628-8220 804 648-2405 804 628-8220 804 648-2405 804 628-8220 804 648-3205 804 648-3205 804 628-8220 804 648-3205 804 648-320
Decatur Johnson City Knoxville Memphis Millington Nashville Rosemark Shelby Forest South Pittsburg West Memphis TEXAS Aldine Aledo Austin Corpus Christi COS BBS CompuBasix Dallas Garbage Dump The Coffee Shop Fort Worth Houston Mesquile Pereland Piano Richardson San Antonio UTAH Salt Lake City VIRGINIA Alexandria Arlington Ashland Chesapeake Chester Fairfax-Vienna Falls Church Herndon Highland Springs Manakin Midlothian Norfolk Portsmouth Richmond Virginia Beach WASHINGTON Auburn Bellingham Des Moines Kent Olympia Puyallup Renton Richland Seattle Spokane	.615 689-97.4 901 794-1226 901 794-1226 901 794-1226 615 256-1118 901 794-1226 615 267-6118 901 794-1226 615 267-0115 901 794-1226 615 267-0115 901 794-1226 615 267-0115 901 794-1226 217 803-7920 214 803-030 214 803-030 214 803-030 214 803-030 214 803-030 214 803-030 214 803-030 214 803-030 214 803-030 214 803-030 214 803-030 214 803-030 214 803-030 214 803-030 214 803-030 214 803-3579 214 803-0324 210 403-0324 210 403-222 210 403-222 210 403-222 210 403-222 210 403-222 210 803-5568 804 804-2405 804 622-8220 804 648-2405 804 628-8220 804 648-2405 804 628-8220 804 648-2405 804 628-8220 804 648-2405 804 628-8220 804 648-2405 804 628-8220 804 648-2405 804 628-8220 804 648-3205 804 648-3205 804 628-8220 804 648-3205 804 648-320
Decatur Johnson City Knoxville Memphis Millington Nashville Rosemark Shelby Forest South Pittsburg West Memphis TEXAS Aldine Aledo Austin Corpus Christi CDS BBS CompuBasix Dallas Garbage Dump The Coffee Shop Fort Worth Houston Mesquite Pereland Plano Richardson San Antonio UTAH Salt Lake City VIRGINIA Alexandria Arlington Ashland Chesapeake Chester Fairfax-Vienna Falls Church Herndon Highland Springs Manakin Midlothian Norfolk Portsmouth Richmond Virginia Beach WASHINGTON Auburn Bellingham Des Moines Kent Olympia Puyallup Renton Richland Seattle Spokane Taccoma	.615 689-97.4 901 794-1226 901 794-1226 901 794-1226 615 256-1118 901 794-1226 615 267-6118 901 794-1226 615 267-0115 901 794-1226 615 267-0115 901 794-1226 615 267-0115 901 794-1226 217 803-7920 214 803-030 214 803-030 214 803-030 214 803-030 214 803-030 214 803-030 214 803-030 214 803-030 214 803-030 214 803-030 214 803-030 214 803-030 214 803-030 214 803-030 214 803-030 214 803-3579 214 803-0324 210 403-0324 210 403-222 210 403-222 210 403-222 210 403-222 210 403-222 210 803-5568 804 804-2405 804 622-8220 804 648-2405 804 628-8220 804 648-2405 804 628-8220 804 648-2405 804 628-8220 804 648-2405 804 628-8220 804 648-2405 804 628-8220 804 648-2405 804 628-8220 804 648-3205 804 648-3205 804 628-8220 804 648-3205 804 648-320

The Major BBS with Credit Card add-on modules by DataSafe Publications let you create the successful, profitable BBS you always envisioned!







DISCOUER

Accept these Major Credit Cards Online! Approved or Declined Automatically, 24Hrs/Day



Special 'LIMITED TIME' Offer!

We made a "special" purchase, so now you can "Experience The Major BBS" for the smallest investment ever !! This is a limited time offer, so don't hesitate - get your order in today! Plus, we discount all Galacticomm products!

Version 6.21 - 2 User ONLY !!

Omni-Mall w/ RIP Support!



Omni-Mall™

The first end-to-end shopping mall for The Major BBS. Performs file distribution of data products such as software, data base information and valuable text files. Email receipts and orders Faxed to store managers. Works with the POS Dial module for automatic online credit

VisaMan™ v2.0

\$149

\$249

The premier subscription module for The Major BBS. Works on hourly & subscription based systems. Performs automatic account class switching, credit card checking using MOD 10 and credit/day posting. Designed to work with the POS Dial module for automatic online credit card verification.

Point-of-Sale Dial

SZ50

The POS Dial module is designed to interface with VisaMan and Omni-Mall to perform automatic online credit card approval or declination, 24 hrs a day. Never worry about manual processing of your

Global Power TM

Sounds GREATI

S49

Global Power sets the NEW standard in global command modules. Sysop commands include class switching, key assignment, credit posting and more. User options include password changes, teleconference entrance/exit message changes and Global Graphics(TM) to other users.

AutoRate TM

AutoRate is a credit surcharge utility that allows you to vary credit usage rates based on channel group, day of week, and time of day. Ideal for systems using X.25 leased lines, surcharging high speed modem lines or discounting during off peak hours.

Teleflora CreditLine®



Professional Developer's Group



DataSafe is a member of the Professional Developer's Group (PDG). PDG consists of a group of software developer's dedicated to providing the finest products possible for The Major BBS. When you buy from a PDG member you can count on:

- 30 Day Money Back Guarantee
 Quality Products
- Prompt Shipping of all Orders Well Documented Software
- Response to Bug Reports
 "One-Stop" Shopping

As a member we resell the following PDG member products.

DataSafe Publications, Inc.

ADP Phone Lister AutoRate BBS Lister FOURmation Global Power HelpMan NovaTrek Omni-Mall **POS Dial Module** POS Dev Kit Super Hangman

VisaMan v2.0

High Velocity Software, Inc.

Auto Validator Crossroads Form Editor **Global Destruction HVS Utilities** Major Goose The Newsroom Sysop Notepad **Text File Editor**

Sirius Software

AMS DOS Shell Chat on Demand Happy Birthday Line Monitor Match Maker Remote Console

Online **Employment** Service

Source Code available for most of these modules. Please call us for current pricing and product info.

ataSafe ablications, Inc

PO Box 16032 Albuquerque,NM 87191-6032

505-294-4980 Voice 505-294-1575 BBS 800-870-0004 Sales

COMT - QMODEM OR PROCOMM OVER TCP/IP

by Jack Rickard

The standard solution emerging very rapidly to connect personal computers to the Internet revolves around using Windows with a TCP/IP stack that offers a common program interface to other programs. NetManage was the first off the block with this concept broadly termed Windows Sockets Dynamic Link Library or more commonly WINSOCK.DLL. A shareware version titled TRUMPET WINSOCK is freely available, and allows you to connect your desktop to the Internet using a dialup serial line internet protocol (SLIP) or point-topoint protocol (PPP) account, or if your local LAN happens to be already connected to the Internet, in that fashion.

The advantage of course is that by leaving most of the lower level vagaries of TCP/IP to WINSOCK, it is very easy to write application programs to access various Internet services. With Microsoft's Visual Basic, some documentation on WINSOCK, and a good idea, you can write the next killer application for the Internet.

But there is some reinvention of the wheel that goes on in the process. Telnet is the basic protocol for logging onto a remote service. Most of the "Internet" packages available for Windows provide a telnet client, and several shareware versions are available as well. We have found them almost universally bad - with a lot of the problems centering around such basics as ANSI terminal emulation. The result is that if you telnet to a BBS that is now on the Internet, many of the things you are accustomed to doing on a BBS by direct dial are forfeit - Zmodem downloads, RIP graphics, etc. And everything looks funny.

Well, it doesn't have to be that way. As comes up so often in communications tool development, we are only inches away, if we knew which inch. David Yon of Performance Designs in Concord Massachusetts has found the missing inch and bridged it with a delightfully simple and yes, elegant solution he calls **COMt: the Telnet Modem.**

Basically, COMt allows you to use your existing Windows terminal program such as Qmodem for Windows, Telix for Windows, Procomm for Windows, or

Crosstalk to telnet to systems on the Internet. It does this by acting as a shim layer between the Windows comm driver and the terminal program. You can define any COM port to be your Internet connection, and COMt will connect the terminal program to WINSOCK. To the terminal program, this comm port looks like a Hayes modem. To the outside world, the terminal program looks like a telnet client. You can logon to a BBS on the Internet using Qmodem now.

COMt is not just a superb idea, but the execution is a thing of beauty. Installation is so easy, we weren't sure we had it installed. Put all the files in a directory and click on INSTALL. It will ask you which COM ports you want to define as Internet connections. Note that you can and should define more than one, but only COM1-COM4 are actually available under the standard Windows kernal. COMt can actually support up to eight if you have something like a Digiboard driver installed. But the point is that in Windows, you could have multiple telnet sessions going on simultaneously, and it isn't a problem for COMt and WINSOCK.

The program creates a program group under Windows, and there are readme's and configuration programs in it. We never looked at them, and you don't have to. The config program allows you to change your com port definitions later if you like.

At installation, we defined COM3, which doesn't exist in hardware on our machine, as an Internet connection. We called up Qmodem, and defined COM3 as the device. We then entered ATDT boardwatch.littleton.co.us. And we logged onto our BBS over the LAN with all the power and functionality of Qmodem -RIP graphics, Zmodem downloads, automatic display of downloaded GIF images, and so forth. No further work was done at Boardwatch that day. We could dial anywhere on the net with an ATDT host name, and we were there. Better, if we selected COM 1 as the device in Qmodem, we could then use our modem quite normally. ANSI screens looked like ANSI, RIP screens looked very RIPed up, databases with GIF images displayed flawlessly. It was still IP packets, and a bit jerky depending on the destination, but we were back home on the interface thing.

And it's very flexible. For example, CompuServe is now on the net and you can telnet to compuserve.com. If you have their WINCIM front end in

version 1.3 or later, COMt will let you use it directly via telnet. It is just a shim to redirect traffic from a modem port to a telnet address through WINSOCK. It works with almost any type of existing terminal program and provides responses to that program exactly as if it were a Hayes modem. There are even a few additional "S register" options to play with.

You can dial using either host name (boardwatch.littleton.co.us) or IP address (199.33.229.254). It even allows you to specify a particular port in brackets. You can ATDT 199.33.229.254[25] for example to connect directly to the SMTP mail server, and if you know the talk, type in a message directly.

This may be one of the most delightful little software jewels we've ever found. And there just were no flaws. Crippled? No. When you bring it up the first time there is a discreet little box asking you to register the program, and nothing thereafter. The price? Mr. Yon is asking the world at \$15.95. If you are playing with Internet Protocol connections from Windows, and don't have this little software wrench in your toolbox, you are essentially unarmed. Performance Designs, PO Box 1005, Concord, MA 01742; (508)369-0825 voice; comt@world.std.com.

NETBOY - AN INTERNET CARTOON PANEL

It had to happen, Li'l Abner with a net jones. The Internet has its first, (well the first we've seen) cartoonist in a gentleman named Stafford Huyler, and a regular panel cartoon titled NETBOY available on a World Wide Web server accessible Mosaic using http://www.interaccess.com/netboy.html. The cartoons are in the instantly recognizable "funny papers" style, with NetBoy and Bran LANman, a couple of stick figures in a vaguely 3D world, seeking adventure and mayhem in the world of the Internet. The comic strip deals with such issues as cryptography, the clipper chip, hacking, and so forth. In a recent series, NetBoy and Bran LANman have hacked into a system somewhere, and redirected the income from Home Shopping Club to their own account.

The strip is humorous, but very inside the net. We approached Huyler, who in real life works for an Internet services provider, about carrying NetBoy in Boardwatch Magazine, and he noted he had heard from several magazines that wanted to carry NetBoy but wanted something a little more generic and understandable by the wider audience. We did plead for the original, very nettish version for Boardwatch, and we'll be carrying it for the next six issues for your amusement. If you get it, great. If you don't, call somebody. We think it's hilarious. Inquiries to netboy@interaccess.com.

WEBCRAWLER - WORLD WIDE WEB BY E-MAIL

The world has gone gaga over the NCSA Mosaic program, a graphic interface to the World Wide Web, a network of servers offering information and hypertext links. Those with e-mail only access to the Internet are a little left out of the game. While e-mail access to an interactive multi-media network may make little sense, it can technically be done. Odd de Presno (opresno@extern.uio.no) of Norway, publisher of the electronic Online World Monitor Newsletter sent us the scoop on how to do it, and notes that many of the WWW pages are indeed available by e-mail via a list processor in Cern Switzerland titled the WebCrawler. It provides a slow scan access to most WWW home pages.

You can request WWW pages by sending email to listproc@www0.cern.ch. Put your retrieval commands in the BODY of the mail, like this

www

http://www.biotech.washington.edu/WebCrawler/WebCrawlerExamples.html

If you use the example above, you'll receve a page full of instructions on how to use the WebCrawler service.

INTERNET STATS FOR FIRST HALF OF 1994

One of the most basic continuing measurements of the size of the Internet was released in August by the Internet Society. For more than ten years, the Internet has been measured almost every quarter by the number of host computers reachable. This is a key value because one of the most fundamental capabilities of the Internet is to directly link virtually any kind of computer across almost any kind of telecommunication medium. The measurement is described in the Internet document RFC 1296.



INTERNET GROWTH. Change Oct 93 **Jul 93** July 94 Jan 94 81% 2.056.000 1.776,000 Hosts: 3,212,000 2,217,000 26,000 77% **Domains:** 46,000 30,000 28,000

The latest measurement - sometimes referred to as "the Internet Walk" - shows 3.2 million reachable machines. This is an increase of 81 percent for the past year, and represents an even steeper than normal increase over the past six months. Indeed, 1 million new hosts were added during the first six months of 1994. Much of the increased growth is attributable to growth outside the U.S. in over 80 countries. These values are shown in the sidebar.

The so-called Internet Domain Survey is the product of Mark Lottor of Network Wizards. The Domain Survey attempts to discover every host on the Internet by doing a complete search of the Domain Name System. The latest results were gathered during late-July 1994 are listed below. For more detailed data see the zone directory on ftp.nw.com, or the Net Wizards World Wide Web home page at http://www.nw.com

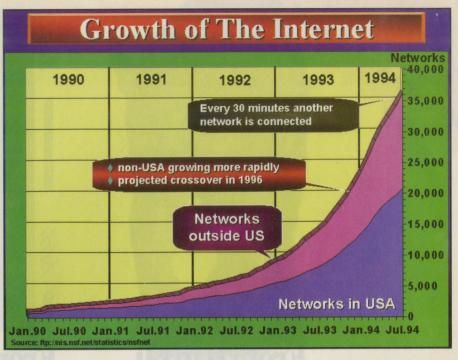
The Internet Society is the international organization for the Internet, its technologies and applications. For more information on this subject or other information concerning the Internet, the Society's activities and publications, contact the Society's International Secretariat at 12020 Sunrise Valley Dr., Suite 270, Reston, VA 22091; (703)648-9888 voice; (703)648-9887 fax - or visit the ISOC home page using Mosaic at: http://info.isoc.org

ONLINE NEWSPAPER TO DEVELOP INTERNET PRODUCTS WITH MOSAIC COMMUNICATIONS SOFTWARE

The San Jose Mercury News announced August 23rd a development agreement with Mosaic Communications Corporation of Mountain View, California, for software that will enable the Mercury News to deliver an electronic newspaper on the Internet.

The Mercury News, a Knight-Ridder newspaper, currently offers Mercury Center, which was the first complete online newspaper service.

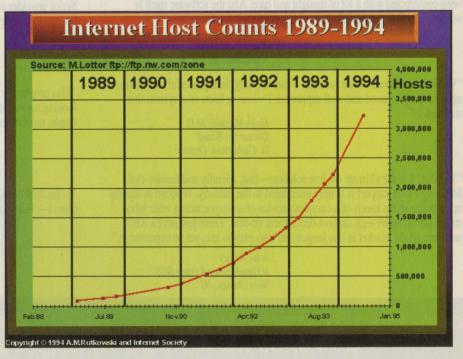
"We're excited about the potential of the World Wide Web and about being the first newspaper to use Mosaic Communications's new software," said Bob Ingle, president and executive editor of the Mercury News. "We've



been concerned about the ability of the current Web server software to handle the demands of a daily newspaper and the potential of the client software to be a true consumer product." said Ingle. "We didn't want to put up something that would be an anticlimax after the success of Mercury Center on America Online. Mosaic Communications products are the missing pieces of the puzzle."

Mosaic Communications intends to be the premier provider of open software to enable the most effective exchange of information and commercial enterprise over global networks. The company was co-founded in April 1994 by Dr. James H. Clark, founder of Silicon Graphics Inc., and Marc Andreessen, creator of the original Mosaic software for the Internet. The company plans to develop commercial versions of Mosaic, the most popular software for accessing the World Wide Web on the Internet.

"The Mercury News team's enthusiasm for online services and their proximity to us makes this an ideal partnership," said Clark, chairman and CEO of Mosaic Communications. "Our technical teams have already spent many hours together to identify





From 0 to 60 in 4 seconds!

From box to BBS in 40 minutes!

What do Sysops like most about the new Wildcat! 4? Depends on who you ask. Many say they like how fast and easy it is to set up. Some told us their BBS was up and running in less than an hour. Others are wild about Wildcat! 4's expanded file and message areas -32,760 of each! Still others love how flexible, expandable and customizable Wildcat! 4 is. They can get creative and express their own personalities through their BBS.

With more than 250 new features and enhancements, there's a lot to like about the new Wildcat! 4. And a lot of new reasons why The World's Most Popular BBS Software™ is the best BBS software running!

LISTEN TO WHAT SYSOPS ARE SAYING ABOUT WILDCAT! AND NEW VERSION 4!

"Wildcat! 4 is the most user friendly, full featured BBS software I have ever had the privilege of using. The installation programs, utilities and manuals have been constructed with a lot of thought and care. And the software itself is nothing less than amazing."

Drew Sprang The Polaris BBS Mansfield, OH

"Wildcat! is a hands-down favorite—user friendly, fast, powerful, easy to set up, well programmed and well supported. I've never been on a system that matches it!'

Hugh Mitchell, M.D. Doctor On Board St. Catharines, Ontario

"Wildcat! 4 is the ultimate on-line solution—fast, friendly and feature-rich. Mustang's tech support is simply unequaled in the industry. Wildcat! is equally appropriate in the hands of a complete novice or a programming whiz who might run an entire tech support department on-line. There just isn't a BBS software on the market in this league that's so easy to use, yet so expandable."

> John Tracey NJ Intelligence Agency BBS West Orange, NJ

"Wildcat! 4 is the most progressive BBS platform on the market. Its new configurable architecture and the graphics capabilities of RIP Script provides a truly individualistic look and feel. Wildcat! is only limited by your personal creativity and imagination."

> Dan Dunn Atlanta Information Exchange BBS Atlanta, GA

"This program is fabulous—beyond words! It's everything I was looking for in a BBS software package and then some! Give my thanks to all of the programmers who made Wildcat! 4 what it is."

> Tony Harrison Shadowgate BBS Sterling, IL

"I checked out QBBS, RBBS, PCBoard, BBSXpress, Spitfire and others-Wildcat! was the easy winner."

> Benjamin Kopp The Graphics ExchangeSystem Atlanta, GA

Call the MSI HQ BBS (805-873-2400) to see what Wildcat! 4 looks like from the caller's point-of-view and to discover even more reasons why Sysops are wild about Wildcat!

With over 250 new features, The World's Most Popular BBS Software™ is the best ever!



Callers can preview multiple .GIF files by downloading a thumbnail first. They can even choose the resolution and number of .GIFs per thumbnail!

Wildcat! 4 features expanded RIP support so you can customize any Wildcat! prompt with your own personal RIP screen ... or use the ones that come with Wildcat! 4.



Your wish list of smart features is here today!

With the introduction of Wildcat! 4, we've made the most user friendly and the most popular BBS software in the world even easier to use and more powerful. You'll find more than 250 great new features and enhancements—many of which were suggested by Wildcat! Sysops themselves.

- Expanded File and Message Conferences—supports up to 32,760 File and Message Conferences, giving you virtually unlimited room to grow.
- Super-Fast Message Databases—makes moving massive amounts of messages in and out of Wildcat! faster than ever. Means your BBS will spend more time handling calls, less time tossing mail.
- .GIF Thumbnailer allows callers to preview multiple .GIFs before downloading.
- Automatically Import File Descriptions—supports FILE_ID.DIZ and DESC.SDI, saving you and your callers time while maintaining better file descriptions.
- Flexible Modem Setup—supports all v.FC, v.34, v.32 terbo. Even has the "smarts" to handle any new modem that appears on the market in the future.

Terrific add-on programs also available.

You can get Wildcat! 4 in single and multi-line configurations to suit your needs. And with these popular add-on products—all written and supported directly by Mustang Software—Wildcat! 4 is simply the best value available anywhere.

wcCODE

our BASIC-like development language for Wildcat! 4

wcPRO Utilities

a powerful statistical and analytical package with Fax-On-Demand

WCGATE

our Internet E-mail, Usenet newsgroup and MHS Gateway

MUSTANG SOFTWARE INC. Call toll-free for more information or the name of the dealer nearest you

1-800-663-1446

Customer service hours: 8am to 5pm, PST, Monday through Friday

Wildcat!, The MSI horse logo and artwork, and The World's Most Popular BBS Software are trademarks of Mustang Software, Inc.

© 1994, Mustang Software, Inc.

- Improved Internet Message Handling—64KB messages give you over 800 lines of text. We've also expanded our message headers to support up to 70 characters for those long Internet addresses.
- Duplicate Name Support—so your BBS can handle common caller names.

 Also lets you have common files like PKUNZIP in multiple file areas.
- Local Sysop Node Support—lets you perform maintenance while callers are on-line.
- Free-Form Menu Structure—lets you customize the user interface from log-on to log-off.
- Message Editor—with built-in, on-line spell checker, cut-and-paste, and much more.
- wcCHAT Module—supports multiple channels and up to 1,000 Sysop defined action words.
- Multilingual Support—lets users select the Sysop-defined interface of their choice.
- Run Powerful wcCODE Applications—no compiler required.
- Group Mail Support—allows messages to be automatically directed to Sysop-defined lists of users.

No-nonsense, unconditional 30-day money-back guarantee

Whether you're just starting your first BBS or a Sysop with years of experience, Wildcat! 4 is guaranteed to blow you away! If it doesn't, just return it to the store where you bought it within 30 days for a full refund.

FREE CD-ROM FROM MUSTANG!

Now—get this limited-edition CD-ROM absolutely FREE when you buy Wildcat! 4! It's filled with thousands of the most recent shareware programs in dozens of categories and is especially configured to work flawlessly on your Wildcat! 4 BBS.

To get your FREE copy, just pick up Wildcat! 4 at your nearest software retailer before Feb. 28, 1995. Then send back the registration card along with this coupon.*

Mustang Software, Inc. • 6200 Lake Ming Road • Bakersfield, CA 93306 • (805) 873-2500 Fax (805) 873-2599 • BBS (805) 873-2400

*Buy Wildcat! 4 between October 1, 1994, and February 28, 1995, and mail in this coupon along with your product registration card—to receive our CD-ROM while supplies last. Void where prohibited by law. Offer good only for purchases of Wildcat! 4 when coupon is accompanied with product registration card.



market needs for online publishing. The use of the Internet for these applications has been limited until now by lack of security, performance and ease of use. By addressing these issues, Mosaic Communications software will enable content providers such as the Mercury News to maintain their subscriber relationships while substantially expanding their reach via this fast-growing global network."

The Mercury News is the source of the first complete online newspaper, Mercury Center. Mercury Center offers:

- · The full text of the daily paper.
- The daily paper's classified advertising.
- Access to the electronic archives of the Mercury News and 17 other U.S. newspapers.
- · Electronic mail.
- Bulletin boards to reach the paper's editors and columnists.
- · Online advertising.
- Hundreds of other stories every day that supplement the printed edition of the paper.

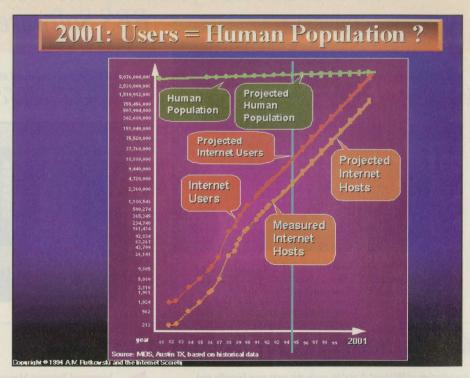
The Mercury News is the local newspaper for the region that is leading the development of the Internet. Its circulation area includes the headquarters of Sun Microsystems, Hewlett-Packard, Apple Computer, Cisco Systems, Silicon Graphics, Adobe, Stanford University, and Intel. Its coverage of Silicon Valley business and the Internet in many ways makes it the hometown paper of cyberspace. Nearly one-third of the households in the Mercury News circulation area have a modem, three times the national average.

"Mosaic creates an open market for information," said Ingle. "We believe that in that kind of marketplace newspapers have something significant to offer the consumer."

Barry Parr, Marketing Manager, Mercury Center, San Jose Mercury News, 750 Ridder Park Drive, San Jose, CA 95190; (408)920-5384; barryparr@sjmercury.com

WAXWEB MOSAIC-MOO

This network-delivered hypermedia project, based on David Blair's electronic film "WAX or the discovery of television among the bees" combines one of the largest hypermedia narra-



tive databases on the current free Internet with a unique authoring interface that allows Mosaic or MOO users to make immediate, publically visible hypermedia links to the main document.

Waxweb consists of more than 900 pages of hypertext, available to both WWW (Mosaic) and MOO users. English, French and Japanese text versions of the film's monologue will automatically be inserted into the hypertext, according to the wishes of the visitor. Mosaic users will have

access to the hypermedia portions of the document, which includes the entire film embedded as 1600 color stills, 560 mpeg video clips, and 560 AIFF audio clips, including the sound-track in English, French, German, and Japanese. This document has been created by David Blair, with invited contributions by a number of authors, and generous assistance provided by Melynda Barnhart and Anna Youssefi.

Visitors have the ability to make immediately visible links from any word to any other word, add comments to any



page, and also to create their own pages (or many pages!), thus adding to narrative of the main Waxweb. By turning a MOO (text-based virtual reality) into a dynamic HTML document, Mosaic users will have the ability to use a forms-based interface to transparently write publically visible hypertext (and hypermedia) additions to the main document. This breakthrough in Mosaic functionality has been written by Tom Meyer, with assistance from Suzanne Hader, and some coding help from Chiba.

In 1993, "Wax" was the "First Film on the Internet" (Markoff, New York Times, Business section, 5.24.93), sent out as a relatively high bandwidth multicast over the experimental multimedia backbone (MBONE). WAXWEB is an attempt to re-multicast "Wax" in a form more appropriate for the current Internet. As a narrative server available to both text interface and visual interface users, WAXWEB uses hybridized off-the-shelf freeware/shareware tools to demonstrate that the 5,000,000 channels are here now.

The WaxWeb project was made possible by networked associate fellow status provided by the Institute for Advanced Technology in the Humanities at the University of Viriginia, headed by John Unsworth. WAXWEB opened to the Internet on July 24th, 1994. Waxweb has received partial funding from the New York State Council for the Arts -Electronic Arts finishing fund-, administered by the Experimental Television Center, Owego, NY. Software and technical assistance were provided by Eastgate Systems, maker of Storyspace hypertext software. Mpeg compression hardware and software provided by Xing Technologies. SLIP access has generously been provided by Echonyc.com.

Users of WWW readers (Lynx, Mosaic) can reach Waxweb MosaicMOO at this URL: http://bug.village.virginia.edu:7777

MOO people can reach the Waxweb MosaicMOO at: bug.village.virginia.edu 7777

Contact David Blair at: artist1@bug.village.virginia.edu

INTERNET COUNTRY HOSTS - JULY 1994

COUNTRY	HOSTS	% OF TOTAL	CHANGE FROM JAN 94 38%
.edu	2,044,401 856,234	63% 27%	38% 41%
.com	774,735	24%	36%
.gov	169,248	5%	31%
.mil	130,176 66,459	4% 2%	26% 31%
.org .net	30,993	1%	146%
.us	16,556	1%	153%
Total Non-U.S.	1,180,776	37%	
United Kingdom	155,706	5% 5%	37% 51%
Germany	149,193 127,516	4%	48%
Australia	127,514	4%	42%
Japan	72,409	2% 2%	69% 117%
France Netherlands	71,899 59,729	2%	43%
Sweden	53,294	2%	40%
Finland	49,598	2% 1%	24%
Switzerland Norway	47,401 38,759	1%	22%
Italy	23,616	1%	38%
Spain	21,147	1% 1%	79% 30%
Austria South Africa	20,130 15,595	<1%	42%
New Zealand	14,830	<1%	157%
Korea	12,109	<1% <1%	35% 175%
Denmark Belgium	12,107 12,107	<1%	147%
Taiwan	10.314	<1%	29%
Hong Kong	9,141	<1% <1%	60% 28%
Italy Poland	8,464 7,392	<1%	55%
Brazil	5,896	<1%	63%
Czech Rep.	5,639	<1% <1%	169% 122%
Hungary Mexico	5,390 5,164	<1%	45%
Portugal	4,518	<1%	25%
Singapore	4,014	<1% <1%	45% 170%
Chile Ireland	3,703 3,308	<1%	103%
Iceland	3,268	<1%	73%
Russian Fed. (SU)	3,145 2,958	<1% <1%	142% 249%
Greece Czech&Slovak (CS)	1,869	<1%	-36%
Malaysia	1,322	<1%	204%
Turkey Thailand	1,204 1,197	<1% <1%	140% 334%
Slovakia	868	<1%	70%
Croatia	838	<1%	79%
Estonia Slovenia	659 574	<1% <1%	93% -9%
Costa Rica	544	<1%	153%
Romania	453	<1% <1%	466% 37%
Luxembourg Venezuela	420 399	<1%	6%
Ukraine	339	<1%	994%
China	325 322	<1% <1%	*
Russian Fed. (RU)	316	<1%	129%
International orgs	315	<1%	34%
Kuwait Ecuador	297 256	<1% <1%	115% 73%
Argentina	248	<1%	8167%
Latvia	180	<1%	150%
Colombia Uruguay	144 101	<1% <1%	*
Bulgaria	79	<1%	276%
Peru	75	<1%	*
Philippines Indonesia	65 54	<1% <1%	*
Lithuania	53	<1%	Mark 1 *
Egypt	52 46	<1%	11%
Tunesia Peru	40	<1% <1%	318%
Cyprus	38	<1%	660%
Liechtenstein	27 24	<1% <1%	59%
Panama Nicaragua	23	<1%	*
Macau	12	<1%	
Algeria	7	<1% <1%	0%
Fiji Iran	4	<1%	0%
Antartica	7 5 4 4 2	<1%	*
	9	<1%	***************************************
Moldova			***
Moldova Saudi Arabia * Not connected in Jan 1994	1	<1%	*

SUICIDE COUNSELING BY E-MAIL

The Samaritans are a non-religious charity offering emotional support to the suicidal and despairing. A test of "Help By E-mail" launched on July 14, 1994 proved so successful that an Internet domain is now open and is reached by mailing: jo@samaritans.org.

The E-mail service is run from Cheltenham, England, and is reached from anywhere with Internet access. At the launch, Mike Haines, the Director said: "During the test month we received over 200 messages. Many were from well wishers, journalists and academics but there were around 15 very desperate people as well. The need for a full launch of our service with an easier address was amply demonstrated."

The Samaritans have been offering support to the suicidal and despairing for over 40 years by phone, visit and letter. Callers are guaranteed absolute confidentiality and retain the right to make their own decisions including the decision to end their life. Samaritans

are carefully selected and prepared for this work (for which they are not paid). Those working with E-mail have additional training. Volunteers read and reply to mail every day of the year. A nominal end date of December 31, 1994 has been set but initial results have been so encouraging that it is likely to run indefinitely.

The idea of an Internet service was born when a volunteer was exploring the UK based CIX conferencing service. Here, he discovered the "suicidehelp" self help group and Newsnet groups such as "alt.support.depression." After discussions with The Samaritans General Office it was decided to try offering a service from Cheltenham. The kind donation of a modem by US Robotics was a great help as was the assistance of staff at Compulink Information Exchange (CIX). The Samaritans of Cheltenham and District, 3 Clarence Road, CHELTENHAM, Glos, England; Emergency phone: +44 242 515777; Press enquiries: +44 452 854017; E-mail: jo@samaritans.org (samaritans@cix.compulink.co.uk retained) Anonymous E-mail: samaritans@anon.penet.fi



PC/4	
PC/4 w/16550's	\$355.00
PC/4e	\$475.00
PC/4 Cable	\$39.00
PC/8	\$395.00
PC/8 w/16550's	\$470.00
PC/8e	\$495.00
PC/8i	
PC/8 Cable	\$70.00
PC/16	\$925.00
PC/16 w/16550's	\$1020.00
PC/16e	\$945.00
PC/16i	
RJ45 cable included on PC/	16 boards!
RJ45 to DB25 cables	ea \$15.00

This Month's Special

PC/8e w/16550's & Cable \$540.00 (Includes free UPS ground shipping.)

To Order, Call:

The INDEX System™

(404) 924-8667

Sale prices expire 10/30/94. Some restrictions apply.

FULL TEXT SEARCHING FOR TBBS — THE "MUST-HAVE" UTILITY

QuickSearch

Text display is an integral part of virtually every BBS. But once you're displaying information from text files, you quickly learn that your users want more. They want to search for information, and be able to select and display that information quickly and easily.

That's where QuickSearch from QOL Software comes in. QuickSearch allows you to assemble hundreds — even thousands — of text files into collections and provide full-text, boolean logic keyword searching. With QuickSearch, users locate the information they're looking for in seconds, complete with powerful display features. Technical help notes, articles, manuals, reference materials and much more can now be made accessible online. No wonder companies like Intel, eSoft and *Boardwatch* Magazine use QuickSearch on their own BBSs.



QOL Software

Halifax, Nova Scotia, Canada Product Information: (902) 429-0555 Sold by select distributors worldwide. BY AVAILABLE FROM

Voice: (800) 949-3562

BBS: (303) 733-0773

Fax: (303) 777-2876

SOFTWARE E-Mail: info@bryant.com

"QUICKSEARCH" IS A TRADEMARK OF QOL SOFTWARE. TBBS 2.2 OR HIGHER AND TDBS 1.2 OR HIGHER REQUIRED. COPYRIGHT 9 1994 QOL SOFTWARE.

Come play with me! I'll be at **Alternative** BBS



An adult contact board

- Live Online Chat
- Online MatchMaker
- XXX Color Graphics
- **Personal Classifieds**
- **Erotic Message Bases**

Singles · Swingers · Gay · TVs

8 Nodes - 2400/9600/14400 Bps Modem: (718) 746-6800

How To Successfully Run A BBS For Profit

This 304 page, fact filled book, contains 14 chapters. Each concludes with a worksheet to assist you in implementing the information provided. There is also a "Marketing Toolkit" with samples you can customize for your BBS, including a Press Release for announcing your BBS and a Direct Mail letter to first time callers encouraging them to call back and subscribe to your BBS.

There are so many new ideas presented, you will want to implement several right away. To assist you in prioritizing which to do first, a \$99 DOS based decision support software program, BestChoice3, is included for FREE! As a bonus, 16 vendors have included discount coupons totaling \$1,000+ in savings on products for Sysops

There is NO RISK with our UNCONDITIONAL 90 day money back guarantee. Order Today!

Some of the chapters are:

- · Pricing for Profits

Interest

- · Getting the Word Out Hooking Your Caller's
- Assuring Your Callers Return
- Collecting Your Money
- Owning a Gold Mine
- Growing & Expanding Successfully

Only \$49.95 + \$5 s/h MC/V/AmEx

56089 29 Palms Hwy. Suite 254-BW10 Yucca Valley California 92284

1 (800) 776-3818 1 (619) 228-9653 fax 1 (619) 369-1185

COMMERCIAL DOMAINS WITHIN THE U.S. AND CANADA JULY, 1994.

A total of some 17,000 commercial (.COM) domains were registered as of July, 1994 across the U.S. and Canada. The table below lists the top 50 areas defined by telephone area code in order of the number of domains. We found it interesting to note that the Denver/Boulder area was the third most densely .COM'ed area in the country.

RANK	AREACODE	DOMAINS	STATE	METRO AREA
1	415	1460	CA	San Francisco
2	408	1158	CA	San Jose
3	303	942	CO	Denver
4	617	739	MA	Boston
5	212	532	NY	Manhattan
6	703	527	VA	Arlington
7	510	497	CA	Oakland
8	206	429	WA	Seattle
9	619	375	CA	San Diego
10	508	330	MA	Worcester/Framingham
11	708	318	IL	Aurora
12	612	314	MN	Minneapolis/Saint Paul
13	416	297	ON	Toronto
14	301	285	MD	Silver Springs
15	310	285	CA	Los Angeles
16	503	282	OR	Portland
17	714	270	CA	Orange County
18	713	245	TX	Houston
19	512	244	TX	Austin
20	214	226	TX	Dallas
21	313	222	MI	Detroit
22	818	220	CA	Pasadena
23	602	218	AZ	Phoenix
24	908	215	NJ	Elizabeth
25	215	213	PA	Philadelphia
26	203	205	CT	Hartford
27	404	203	GA	Atlanta
28	201	172	NJ	Paramus
29	312	148	IL	Chicago
30	805	146	CA	Bakersfield
31	603	145	NH	Concord
32	216	144	ОН	Cleveland
33	719	143	CO	Colorado Springs
34	412	141	PA	Pittsburgh
35	609	129	NJ	Atlantic City
36	202	128	DC	Washington
37	516	120	NY	Hempstead
38	919	120	NC	Raleigh
39	305	115	FL	Miami/Fort Lauderdale
40	604	115	BC	Vancouver
41	410	114	MD	Baltimore
42	614	109	OH	Columbus White Blains
43	914	106	NY	White Plains
44	513	105	OH	Cincinnati
45	801	97	UT	Salt Lake City
46 47	314	95	MO FL	St. Louis
	407	93	FL NY	Orlando
48 49	718	92	FL	New York City Tampa
50	813 613	88 87	ON	Ottawa
30	013	07	OIV	Jilawa

INTERNET UUCP Host List

BBN Technology Services NEARnet 10 Moulton Street Cambridge, MA 02138 Voice# (617)873-8730 Fax# (617)873-5620 (internet) nearnet-join@nic.near.net

\$2,890 year \$1,000 registration fee

2901 Hubbard Street Ann Arbor, MI 48109 Voice# (313)998-6103 Fax# (313)998-6105 (internet) info@cic.net

\$35 month \$2.50 hour prime time \$2 hour non prime time \$175 registration

CL2 global corp. CL2 global corp.
3390 Spottswood Ave.
Memphis, TN 38111
Voice: (901)452-3388
Fax: (901)757-4050
Data: (901)327-8718
e-mail: internet.info@cl2globl.net \$30 per year plus \$0.10 per message FTP/Telnet \$25.00 month \$1.50 per hour

Clark Internet Services Clark Internet Services 10600 Route 108 Ellicott City, MD 21042 Voice# (800)735-2258 Then Give the following # (410)730-9764 Fax# (410)730-9785 Data# (410)730-9786 (internet) info@clark.net

\$30 month \$264 annual \$25 registration

CNS Internet Express CNS Internet Express
1155 Kelly Johnson Blvd.
Suite 400
Colorado Springs, CO 80920
Voice# (719)592-1240
(800)748-1200
Fax# (719)592-1201

\$10 monthly minimum \$2.75 hour \$8.00 hour 800 service \$35.00 registration

Colorado Supernet Colorado School of Mines 1500 Illinois Street Golden, CO 80401 Voice #(303)273-3471 Fax#(303)273-3475 (Internet) info@csn.org

(internet) info@cscns.com

\$3 hour \$40 registration \$15 month minumum

CyberGate, Inc. 662 South Military Trail Deerfield Beach, FL 33442 Voice# (305)428-4283 Fax# (305)428-7977 (Internet) info@gate.net

\$20 month includes 10 hrs 1 hour above 10 hrs \$50 setup fee

Doyle Monroe Consultants 267 Cox Street Hudson, MA 01749 Voice# (508)568-1618 Fax# (508)562-1133 (internet) info@dmc.com

Free Thirty day trial period. Variety of plans starting as low as \$5 a month, wil never exceed \$150 a month

DPC Systems 537 Cloverleaf Dr. Monrovia, CA 91016 Voice# (818)305-5733 Fax# (818)305-5735 (internet) connect@dpcsys.com \$15 Month \$2.00 hour \$25 registration

Global Connect 497 Queens Creek Rd Williamsburg, VA 23185 Voice#: (804)229-4484 Fax#: (804)229-6557 \$30 month No setup, no hourly

Holonet 46 Shattuck Square Suite 11 Berkeley, CA 94704 Voice# (510)704-0160 fax# (510)704-8019 (internet) info@holonet.net

\$6 month \$2-4 hour \$50 registration **IDS World Network** 3 Franklin Rd East Greenwich, RI 02818 Voice# (401)885-6855 Fax# N/A (internet) info@ids.com

IMS Intercom 6418 Symposium Clinton, MD 20735 Voice# (301)856-2706 Fax#: (301)856-5974 BBS#: (301)856-0817 (internet) led@imssys.com

InfiNet Infinite Systems PO Box 02138 Columbus, OH 43202 Voice# (614)268-9941 BBS# (614)268-3639 (internet) info@infinet.com \$15-45 month \$15 month flat rate

\$15 month \$80 6 months \$150 year

\$20 month \$30 Connect fee

INTAC Access Corporation 256 Braod Ave. Palisades Park, NJ 07650 Voice: (201)944-1417 Fax: (201)944-1434 Data: (201)944-3990 finger info@intac.com

\$50 to activate \$30 month w/o newsfeed \$2.00 hour newsfeed

ISLAND NET Victoria, BS Voice# (604)479-7861 BBS# (604)477-5163 (internet) mark@amtsgi.bc.ca

\$2.00 hour \$75.00 setup

Maestro Technologies 29 John St New York City, NY 10038 Voice# (212)240-9600 BBS# (212)240-9700 (internet) staff@maestro.com

\$100 month \$125 setup

MCSNet 3217 N. Sheffield Chicago, IL 60657 Voice# (312)248-UNIX Fax# (312)248-8649 BBS# (312)248-0900 (internet) info@mcs.com \$2.00 hour first 5 hours \$1.00 thereafter in a calendar month \$15.00 month minimum charge. \$10.00/setup

Merit/MichNet 2901 Hubbard Pod G Ann Arbor, MI 48105 Voice# (313)764-9430 Fax# (313)747-3185 (internet) info@merit.edu \$35 month \$40 registration

501 N Tenth Rm 124 Lincoln, NB 68588 Voice# (402)472-897 Fax# (402)472-8486 (internet) cfarnham@unl.edu

\$60 month \$150 registration

MRNet 511 11th Ave South Box 212 Minneapolis, MN 55415 Voice# (612)342-2570 Fax# (612)344-1716 (internet) dfazio@mr.net

\$55 month \$150 registration

Neosoft, Inc 3408 Mangum Houston, TX 77092 Voice# (713)684-5969 Fax# (713)684-5922 (internet) info@neosoft.com

\$54.95 per month

Neosoft, Inc 3408 Mangum Houston, TX 77092 Voice# (713)684-5969 Fax# (713)684-5922 (internet) info@neosoft.com

\$54.95 per month

INTERNET UUCP HOST LIST

NJCC P.O. Box 6909 Lawrence, NJ 08648 Voice# (609) 896-2799 Fax# (609) 896-2994 UNIX Dialups: (609) 896-3191 BBS: (609) 895-0398 (internet) info@pluto.njcc.com \$49.95 1 time setup \$19.95 monthly charge

UUNET Technologies 3110 fairview park drive falls Church, VA 22042 Voice# (800)488-6384 fax# (703)204-8001 (internet) info@uunet.uu.net \$36 month \$2.60-5.60 hour

Voice# (212)787-6160 (internet) info@panix.com \$2 hour \$10 month for a user account

VoiceNet/DSC 17 Richard Road Ivyland, PA 18974 Voice# (215)674-9290 Voice# (800)521-2733 fax# (215)674-9662

Variety of services \$35-500 setup \$5-150 monthly fees

1770 Massachusetts Avenue #273 No installation Cambridge, MA 02140 Voice# (617)375-0200

XNet PO Box 1511 Lisle, IL 60532 Voice# (708)983-6064 BBS# (708)983-6435 (internet) info@xnet.com

(internet) info@voicenet.com

\$1 hour \$5 month minimum

Box 2683 Santa Barbara, CA 93120 Voice# (805)899-8610 fax# (805)568-2299 Data# (805)899-8600 (internet) rain@rain.org

The Dallas Infomart

\$50 month \$200 registration

\$24.95 month

\$79 month \$75 Registration ZONE 1 Network Exchange Robert Forsythe 5800 Arlington Ave Riverdale, NY 10471 Voice# (718) 549-8078 Fax# (718) 884-7998 (internet) info@zone net

(internet) info@zone.net

Variety of services \$50-995 start up \$1-2 hour \$40-1290 month

1950 Stemmens Freeway Suite 5001 Dallas, TX 75207 Voice# (214)746-4710 Fax# (214)746-4856 (internet) info@onramp.net

\$35 month \$1 hour \$50 registration Magibox 1873 Hidden Oaks Drive Memphis, TN 38138 Voice# (901) 757-7835 Fax# (901) 757-5875 (internet) net.info@magicbox.net

\$30 year packet e-mail \$25 annual live intnet \$25 month/15 free hours \$1.50/hour additional Special Corporate Rate

The Well Fax# (415)332-1669 (internet) info@well.sf.ca.us

Explore New Frontiers...Connect Your BBS to the Internet Nationwide Access • 28.8 Access • 15 Minute Setup • Custom Domain • \$75.00 Setup e-mail info@holonet.net • voice 510-704-0160 • modem 510-704-1058 Modem to 1=800-NET-HOLO to find your closest access number. © 1994 Information Access Technologies, Inc

Create Interactive Online Multimedia Databases

Runs On Every Bulletin Board Platform

Imagine creating a beautiful 24-bit color multimedia database that will run with any BBS. DC Genesys™allows businesses, entrepreneurs and government agencies to easily develop their own robust graphical online informational applications and services. Durand Communications Network, Inc. (DCN) specializes in providing interactive software for the online industry that is affordable, easy-to-configure and easy-to-use.

With your purchase of DC Genesys, you will receive Contact Phonebook™, a turn-key application designed to serve as a general purpose photographic directory. Additional turn-key applications include: Product Catalog™, Auto Seller™, Residential Real Estate[™] and Match Maker[™] (dating service).

With DCN's all new Windows Interface Protocol™(WIP), created with the DC Interface Builder™, your end-users will be able to access your database with a true, all Windows[™] interface. Your applications can have embedded compressed graphics, text files, sound files and more. DC Genesys can be accessed through a royalty free terminal program for DOS and Windows (Macintosh coming soon).

FLEXIBLE USER INTERFACE

- Complete flexibility in design of data-entry, searching, browsing and detailed viewing.
- ANSI, RIPscrip & WIP graphics protocol support for all database functions (DOS & Windows Access).
- Complete entry screen validation via pick lists.
- Easily jumps from browse to detail viewing.

PHOTOGRAPHS IN SECONDS

Support for the following image formats: JPG, CMP, PCX, BMP, TIF, TGA and GIF.

RELIABLE MULTI-USER CAPABILITIES

- Support for multiple users running separate copies of DC Genesys on the same computer (ie: DesqView) or on separate computers on a LAN network.
- Seamless sharing of data with concurrent dBase/FoxPro applications on the same LAN.

POWERFUL SEARCH ENGINE

- Customizable Query-By-Form as well as an "expert mode" command line.
- Relational multiple table support.

Images transfer in 10-15 seconds.

COMPLETE COMPATIBILITY

DC Genesys is 100% compatible with dBASE III PLUS, dBASE IV, or FoxPro2 file formats. DC Genesys is also relational with support for JOINS between fields in different tables.





• All new Dynamic Windows Interface Protocol (WIP) by DCN

- DC Genesys as seen through DC Term for Windows emulating ANSI



FILEX BBS v1.0

A True Windows Client/Server BBS

A Better Way to Communicate

FILEX BBS™ is the first fully client/server, all Windows™, multi-user BBS. Using FILEX technology, Durand Communications Network, Inc. (DCN) has created one of the most powerful BBS platforms on the market. The FILEX BBS is a collection of easy-to-use modules which include: E-Mail, Messaging, File Library, Chat, Accounting, and Security. Now, businesses, entrepreneurs and government agencies can easily develop their own online informational services. Choose either FILEX v2.0 single line, Pro-4 or Pro-8 (simultaneous modem lines) along with FILEX BBS, and you'll have a complete, comprehensive and cost effective interactive BBS.



- Completely Client/Server
- True Windows Graphical Interface
- Multinode Support (up to 8 lines per node)
- Customizable Dynamic Menuing System
- Compressed Image Viewing (CMP, JPG, GIF, BMP, PCX, TIF, TGA)
- DBF Compatible Audit Trail
- Network Compatibility
- Complete Sysop Defined Security for Every Feature
- Multinode Chat with User Defined Macros
- Royalty-Free Distribution of Client Software
- DigiBoard Support
- Faxback Technology

DC INTERFACE BUILDER

Create beautiful menus with built-in compressed images, buttons with graphics and more. The DC Interface Builder allows you to customize your BBS.



MULTINODE CHAT

Using an intuitive interface, create multiple chat forums of moderated topics or request a private conference with another user online.



MESSAGING

FILEX Messaging enables message threading of conversations, spell checking and the ability to cut-andpaste messages from another word processing program.



ELECTRONIC MAIL

With FILEX Electronic Mail, you can easily compose and spell check, edit, view, save, send with return receipt request, and attach files to your e-mail messages.





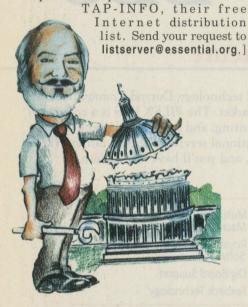
147 Castilian Drive, Santa Barbara, CA 93117 Tel: (805) 961.8700 / Fax: (805) 961.8701 / *FILEX* Server: (805) 961.8702

Access To Government

"JUSTICE(?)" CLINTON-STYLE

by Jim Warren

[This information comes from the prodigious, diligent efforts of James Love and Ralph Nader's Taxpayer Assets Project in Washington DC, of which Jamie is Executive Director. To remain up-to-date on this and other federal access issues — as only online updates can provide — subscribe to



There are three branches of government — executive, legislative and judicial. State and federal executive and legislative branches are rapidly expanding online public access to their records — at cost, which often means without charge, since billing and collection costs can easily exceed the incremental cost of providing online citizen access to public information that is already computerized for internal agency use.

THE LEGAL PRIESTHOOD

However, much of the federal and state judiciaries seem content to sell out the *public* interest in court records for their personal convenience and the benefit of gold-plated law-book publishers and platinum-priced online legal-information services.

At a minimum, too many judges and government attorneys are willing to limit modern [online], *useful* citizen access to *our* public judicial records, only to those who can afford the services of the legal priesthood.

Perhaps, they are just arrogant and dumb about their obsolescence.

There is a long, cozy relationship between the courts and the law-book publishers that organize and publish court decisions. And some of those legal publishers are heavily involved in computerizing court records, for print-publication as well as making them available online — to those who have O. J. Simpson legal budgets. Understandably, they would like to remain the only online sources of those records.

When print publication was the only option for distributing court records, the coziness was reasonable — but no longer.

Court records are public records, except for the very few that are sealed by judicial order. And court decisions, including those that form the massive body known as "case law," are almostinvariably prepared using computers. The same is true for trial transcripts and most briefs submitted by most attorneys. And there are serious proposals that attorneys be required to submit their briefs to the courts in digital form (e.g., see "Justice in the Balance, c. 2020," the December, 1993, Report of the Commission on the Future of the California Courts, Supreme Court of California, San Francisco California 94107).

There are two ringers regarding court records:

- Each court is more or less free to decide whether to provide copies of these public records to the public in computerized form.
- 2. Each court is more or less free to adopt whatever case-citation system they wish, requiring that all briefs filed with that court reference case-law by those citation-codes. And the traditional citation systems are one or another of those generated and copyrighted! by some law-book publisher.

Thus, even if one can obtain computerized copies of public judicial records, one may not be able to circulate them with the essential, court-mandated citation codes included, thus making it impossible to use them to prepare briefs.

BOARDWATCH COLUMNIST TO RECEIVE HUGH HEFNER FIRST AMENDMENT AWARD

The Playboy Foundation has announced that Jim Warren, who is our government-access columnist, will receive the Hugh M. Hefner First Amendment Award in the Government category, for his ongoing work to open online citizen access to government, and his efforts to assure that civil liberties and privacy protections remain robust in cyberspace.

The award will include a specially-designed plaque and a check for \$5,000, presented at a November 16th luncheon ceremony in New York City's Waldorf-Astoria Hotel.

In the federal justice system, this problem came to a head last year. West Publishing — which had been selling the Department of Justice computer copies of federal case-law, along with computer-assisted legal-research services (CALR), for ten years of the Reagan and Bush administrations — decided to cut 'em off.

First, this left DOJ without computer copies of the last ten years of federal case law that were essential for CALR operations — until such time as DOJ can dredge up copies of all the cases from all the courts and re-computerize them.

Second, even if DOJ re-computerized what they've been paying West for ten years to use, many federal courts mandate the use of West's citation system, and West zealously defends its proprietary ownership of those copyrighted page and line-numbers.

A PROPER PUBLIC SYSTEM

DOJ needs CALR services as soon as possible — but preferably using a non-proprietary citation system, to the extent that the various courts will deign to permit one. As of our early-August press deadline, DOJ was expected to issue a Request for Proposal (RFP) before the end of August — seeking proposals for a CALR system for DOJ, presumably including re-computerizing of the missing years of federal case-law.

But Carl Levin, Chair of the Senate Subcommittee on Oversight of Government Management, wrote an August 16th letter to Attorney General Janet Reno, stating in part:

"This RFP has been the subject of discussion among members of your staff, the public interest community, legal librarians, legal publishers, and other interested parties. I believe that issuance of the RFP should be delayed in order to permit the Department to consult further with knowledgeable parties and to reconsider its requirements.

"My concerns about the planned RFP are two-fold. First, I understand that, as currently drafted, only one or two vendors will be able to bid on the RFP. This lack of significant competition, especially in an area of burgeoning innovation and entrepreneurship such as computer services, is troubling on its face.

"In addition, I am concerned that in attempting to meet the immediate legal research needs of its staff, the Department is ignoring other important factors such as the public's interest in the ownership of and access to the federal statutes and case law created by the government at taxpayer's expense.

"New computer technologies make it practical for courts, the Bar, and the public to access legal information efficiently without the use of traditional sources — printed books. Greater electronic dissemination of federal legal materials is blocked, however, by the lack of a data base and a citation system in the public domain. Under the old JURIS system, the Department "rented" rather than "owned" its electronic data base of federal law, and the planned RFP would continue that arrangement.

"In contrast, if the Department were to own the data base, it could make it available to the public, including commercial interests who could reformat it, develop search technologies, etc., and compete to sell the enhanced data to legal researchers.

"Moreover, estimates by people knowledgeable about computer services indicate that ownership of the data base would be cost-effective for the Department."

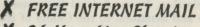
COPYRIGHTED NUMBERS

Levin's letter to Reno continued, "Even if the Department were to own

19.5 Gigs of New Files!

Chat Live, Hottest Adult Clubs Internet Access & FTP 24 Satellite Delivery

Now Adding TOLL FREE ACCESS FREE ACCESS For Calling!



X 24 Hour Live Chatting
X Sports and RPG Clubs

X News and Weather

X Family Fun & Games

X HOT Adult Clubs

X ALL Lifestyles

X Huge .GIF Libraries

X HOT Adult Chatting

X Match Making

C.D.S. 512-887-0787

its electronic data base of federal law, a major hurdle would still remain to making the material more accessible to the public because the current, widely-accepted citation system — relying on volume and page numbers — is the copyrighted material of one publisher [West Publishing].

"Several states and the Sixth [Federal] Circuit have taken steps to establish a public domain citation system that would be "medium neutral" and "vendor neutral" — i.e., that would work with books or computer technology and would not favor any particular publisher. The planned RFP does not take into account the desirability of such a public domain citation system.

"I believe that, when exercising its considerable purchasing power, the government should consider not only its immediate needs as a consumer but also broader issues such as encouraging competition and increasing public access to government information. "Accordingly, it would be appropriate for the Department to delay its planned RFP in order to engage in

further consultation and to consider the issues of public ownership and a neutral citation system."

BELTWAY BANDITS?

The special interests inside the roadway that circles Washington DC known as the Beltway, are often called "Beltway bandits." They shower millions of dollars on federal office-holders and then receive billions of dollars of government-generated benefits, usually at huge tax-payer expense. Could the following be an example?

According to TAP research released in mid-August, individuals affiliated with West Publishing paid \$738,728 in political "contributions" during the three election cycles beginning in 1989. This included more than \$500,000 paid to candidates, \$229,250 paid to the Democratic Party and \$148,572 paid directly to members of the House and Senate Judiciary Committee — which have jurisdiction over the DOJ, the federal court system, and antitrust and copyright law.

The August 16th online TAP report details amounts, dates, payees and recipients.

According to the TAP report: Vance Opperman is the President of West Publishing; Dwight Opperman is its past President and current Chairman. Most of the Democratic Party's quartermillion dollars came from these two public-spirited individuals, with \$100,000 handily paid less than a month before the November, 1992, presidential elections.

In October, 1993, West gave DOJ 90 days to remove its computer copies of federal case-law from DOJ computers. In January, 1994, DOJ shut down its CALR system that had depended on that case-law. A few weeks later, Vance Opperman became one of 17 CEOs appointed to the new National Information Infrastructure Advisory Council. In March, 1994, he paid another \$25,000 to the Democratic National Committee.

The House members who received the highest pay from West-related payees, according to TAP, include:

- Martin Sabo (D-MN), Chair, Budget Committee, \$18,470.
- Jack Brooks (D-TX), Chair, House Judiciary, \$17,500.
- John Conyers (D-MI), Chair, House Committee on Government Operations, \$17,262.
- Patricia Schroeder (D-CO), Member, Subcommittee on Economic and Commercial Law, \$12,500.
- Richard Gephardt (D-MO), House Majority leader, \$9,999.
- Hamilton Fish Jr. (R-NY), Ranking Republican, \$6,000.

On the Senate side, 47% of all the Westrelated payments that TAP listed for Senate Judiciary Committee members went to a single California Senator, with major loot going to several others:

- Diane Feinstein (D-CA), member of committees on copyrights, technology and the law, and rules and administration, \$27,000.
- Al Gore Jr., now Vice President, \$21,691.
- Howell Heflin (D-AL), Chair, Subcommittee on Courts and Administrative Practices, and a member of other committees concerned with antitrust, monopolies, business rights and copyrights, \$11,000.
- Arlen Specter (R-PA), Ranking Republican, Subcommittee on Technology and the Law and a member

of the committee on antitrust and monopolies, \$4,000.

Three of the West-related contributors also paid \$2,300 to the Committee to Draft Ralph Nader for President, in 1991-1992.

Your government at work. (**Whose** government?)

SPEAK UP OR SHUT UP!

Each of us can either do nothing, and let the "important" people inside the Beltway continue to wheel and deal with our tax-funds and our public records, or alternatively, we can express our opinions on these matters - now! — to the President and Vice President who are continuing their campaigns for re-election, to our federal Representative and Senators, to the Chairs of the House and Senate Judiciary Committees, to each of the judges in our region's federal courts, to the presidents of our county and state bar associations, and to the woman that many of us once held in high regard:

The Honorable Janet Reno Attorney General of the United States U.S. Department of Justice 10th Street and Constitution Ave NW Washington DC 20530

[Warren, 345 Swett Rd., Woodside CA 94062; jwarren@well.com, received the 1994 James Madison Freedom-of-Information Award from the Society of Professional Journalists - Northern California for helping open online access to government, and is pushing to put campaign-finance disclosures freely online. He received the Electronic Frontier Foundation's Pioneer Award in its first year; founded InfoWorld and the Computers, Freedom & Privacy conferences; was founding host of PBS' television's "Computer Chronicles," and founding Editor of Dr. Dobb's Journal.

He began working as a programmer in 1968 after ten years teaching mathematics, holds three graduate degrees in computing and mathematics and has taught computing at various universities including Stanford.]

Are Banks Robbing You Of Income?

To really profit from your BBS, you must be able to accept credit card payments. But a merchant account can be tough to get from traditional banks who don't understand your business. At Teleflora CreditLine*, we cater to BBS operators like yourself. All you do is meet our simple qualifications which include no x-rated content and good personal credit. Then, for affordable startup costs and low service fees, you get:

- Visa and MasterCard processing at low discount rates.
- Low cost TelePC software. No minimum volume fees.

Don't hold up your business any longer. Call Teleflora CreditLine® at 1-800-842-7111 now. And laugh all the way to the bank.



WELLS FARGO

"One of the few organizations that actually understands the BBS industry."

—Alan Bryant, Creating Successful Bulletin Board Systems

©1994 Teleflora CreditLine

They couldn't top Synchronet. So we did.

Introducing Version 2.0

PCM5TM

Synchronet v2.0 unveils PCMS, the Programmable Command and Menu Structure. At the heart of PCMS is Baja™, an easy to use basic-like programming language and compiler that allows flexible command shell programming without external programs or add-ons. Because compiled command shells are loaded dynamically upon user logon, multiple BBS structures can be available for your users to choose from; including emulations of other BBSs, complex graphical user interfaces, foreign language shells, and custom applications.

SMBTM

Version 2.0 provides a level II implementation of the new SMB message base format for high speed, high volume, multi-network message storage and retrieval. SMB is highly extensible to support future needs including multimedia!

05/2

Coming soon! Synchronet for OS/2, the 32-bit big brother of Synchronet for DOS. Finally, a powerful and feature rich 32-bit BBS will soon be within your grasp.

Free Demo

Download the free demo today! (714) 529-9525 14.4Kbps V.32bis (714) 529-9547 28.8Kbps V.FC

Synchronet for DOS v2.0

2 node \$ 99.00 4 node \$ 199.00 8 node \$ 299.00 16 node \$ 399.00 250 node \$ 499.00

Digital Dynamics

PO Box 501 Yorba Linda, CA 92686 (714) 529-6328 voice

(714) 529-9721 fax

Compare 8 nodes on a single 486

The state of the s	Synchronet	Wildcat!IM	PCBoard/M	MajorBBS	TBBS
Node license*	\$299	\$799	\$440	\$508	\$895
Programmable	Yes	No	Extra	Extra	Extra
Multiple command shells	Yes	No	No	No	No
Intelligent DigiBoard	Yes	Yes	Yes	No	No
Int14h device support	Yes	No	Yes	No	No
Standard serial ports	Up to 10	No	Up to 4	Up to 2	Up to 2
Caller ID security	Yes	No	Éxtra	Éxtra	No.
Nested security logic	Yes	No	No	No	No
Multichannel chat	Yes	Extra	Yes	Yes	Yes
Private user chat	Yes	No	Extra	Yes	Yes
Offline reader support	Yes	Yes	Extra	Yes	Extra
QWK networking	Yes	Yes	Extra	No	Yes
FidoNet import/export	Yes	Yes	Yes	Yes	Yes
PostLink (RIME) support	Yes	Extra	Yes	Extra	No
Includes RIPscrip menus	Yes	Yes	No	Yes	No
Novell/DOS LAN support	Yes	Yes	Yes	Yes	No
Enhanced CD-ROM suppo		Yes	Yes	No	No
Incoming FAX support	Yes	No	No	No	No
Chat between doors	Yes	No	No	Yes	No
Bidirectional file transfers	Yes	Yes	Yes	No	No
DOS door support	11 types	2 types	2 types	No	No
FILE_ID.DIZ support	Yes	Extra	Yes	Yes	No
Offline NetMail	Yes	Yes	Extra	No	Yes
Offline/Remote file reques		No	No	No	No
Real-time configuration	Yes	No	Yes	No	No

Features and prices compiled from vendor supplied information 2/94, are subject to change without notification. WildcatlIM, PCBoard/M, MajorBBS, TBBS, QWK, FidoNet, PostLink, RIME, RIPscrip, Novell, and DOS are trademarks or their respective companies. Third party utilities may be required for some message network technologies. *for 8 nodes Wildcatl/IM requires a 250 node license, PCBoard/M requires a 10 node license, TBBS requires a 16 node license.

If you haven't checked out Synchronet yet, crank up your modem and download a demo. There isn't a faster, more feature rich BBS available anywhere from anyone. Synchronet combines the robust interactive nature of a multiuser BBS with the speed, power and flexibility of a multinode system.

It was innovative out-of-the-box features such as intelligent variable timeslicing, ARS™ security, RIPscrip, enhanced CD-ROM, and easy to use fully integrated message network support that made Synchronet a multinode powerhouse. And now, with version 2.0, custom programmability, lightning fast high volume messaging, and much more makes Synchronet *the* sysop's choice for BBSing in the 90's.



Multinode Bulletin Board System Software

Disk 1

Copyright 1992 Digital Dynamics All Rights Reserved

EDUCATION LINK

KIDLINK: GLOBAL DIALOG FOR KIDS, 10-15

EDUCATORS HAVE AN INTERESTING OPPORTUNITY

by Rea Andrew Redd

KIDLINK, a grassroots organization, has enabled 23,000 children from 62 countries to enter a global dialog over the past four years. What is impressive is that over half of these conversations occurred in the 1993-1994 school year alone. There is no political agenda and no fees of any type. A child aged 10-15, need only answer four questions in English or their native

Question #1: Who am I?

language.

What is my full name? How old am I? Am I male or female? In what city and country do I live? What is the name of my school?

Question #2: What do I want to be when I grow up? What is my vision of what I want to be when I grow up in terms of work, education, and in general?

Question #3: How do I want the world to be better when I grow up? How would I like to improve the way we treat each other? How would I like to improve the environment we all share?

Question #4: What can I do now to make this happen? What steps can I take now to realize my personal goals? What steps can I take now to realize my vision of the world in which I want to live?

The responses are sent by e-mail to: RESPONSE@VM1.NODAK.EDU

A teacher in Italy enjoys the increase in positive teacher/student interactions arising from KIDLINK; he finds that students now pursue the English teachers through the halls to translate the mail and to help compose responses. A Danish educator seconds that obser-

vation and adds that current events/global problems have now become personalized for his students. A New York State teacher finds her students take the four questions quite seriously and respond in an honest fashion; she overhears her students discussing their futures and how they can puzzle out solutions to their questions. She also comments, "The kids who are excited can get reinforcement; the kids who are depressesed or have a negative outlook can get a dose of . . . a different perspective and good, positive ideas."

For teachers who need administrative clearance, KIDLINK's articles of association and policies are easily available from the menu; its sole purpose is dialog among the world's kids. The KIDLINK board consists of one representative for each of six world geographic areas: Europe, Africa, Asia, Pacific, North America, Central/South America.

KIDLINK has a electronic newsletter, an informal discussion group, KIDCAFE, and a formal research discussion group, KIDFORUM. Both are in five languages: Portuguese, Spanish, Japanese, English and a mixture of Scandinavian languages. Heated discussion topics on 'cafe' and 'forum' this spring were chocolate and architecture. The current topic on the forum is, A Random Act of Kindness, it includes descriptions and presentations of missed opportunities and the recording of impulsive acts. KIDCAFE provides a forum where KEYPALS can pair off for private discussions. But where else can real conversations take place? At a party, of course! KIDLINK celebrated its fourth birthday during a three day fest, May 5, 6, and 7 in 18 countries held at 73 sites, where 3,100 students electronically partied.

One part of KIDLINK information service is a multi-user, multi-channel chatting net called KIDLINK IRC, which is a small, isolated IRC net. Also, a subject-oriented menu system GOPHER runs on an IBM RT computer at Duquesne University in Pittsburgh, Pennsylvania; the focus of the information found on this server is the KIDLINK series of projects, which are intended to help kids get involved in a global dialog through e-mail and other telecommunication exchanges.

KIDLINK is sponsored by universities, church organizations, private individuals, and corporations; of course the organizational board is always prospecting for additional donors. They have a wish list, which includes upgrading the basic KIDLINK organization to ensure continuity from year-toyear, a special outreach coordinator for Africa, Asia, and Central/South America, a coordinator for creative challenge student exhibitions and prizes for the winners, a video recruitment tool, general curriculum development in integrating KIDLINK into a variety of subject disciplines, and an annual KIDLINK conference sponsorship.

To join KIDLINK through the Internet, send the command SUB KIDLINK (your name) to LISTSERV@VM1.NODAK.EDU; put the command in the body of the text. The gopher site for KIDLINK is: kids.citt.duq.edu.

MEMO FROM THE 'DOWN IN THE TRENCHES' DEPARTMENT RE: SETTING UP A HIGH SCHOOL BBS, STUDENT LED

Student leaders of MHS-BBS of Mamaroneck High in Mamaroneck New York, a suburb of New York City, are learning the ins and outs and the ups and downs of the BBS world as they stretch to meet their late September/early October startup goal. Robert Spier and Scott Brown, recovering from their exertions during the spring semester in generating a class yearbook on disk, are now hard at work finalizing an Internet e-mail and news connection, and expanding the high school's FidoNet connection. Plans are to join with a school in Germany via FidoNet in a mixed language experiment. For an honest response to FAQs concerning the set-up of a high school BBS, send questions and words of encouragement to Robert.Spier@ACCBBS.COM

WELCOME A (B)BOARD(S)!

Gene Lott, Program Coordinator for the Education Native American Network (ENAN), announced the broadcast of TBBS BBS on the Internet. Currently, ENAN's system has an Internet feed through a Unix host; Lott operates a 32-line TBBS system, accessed through a bank of toll-free numbers. The purpose of the ENAN BBS is to aid the Bureau of Indian affairs and its Office of Indian

Education Programs (OIEP) in the dissemination of technology through OIEP schools. He requests aid from all interested parties (individuals/educators) who regularly use K12Net, FredNet and other such education oriented telecommunication networks. E-mail your true life experiences to GENEL.@ENAN.UNM.EDU or pick up the phone and dial 505-277-0396. Gene also reads his snail mail: Gene Lott. ENAN Project Coordinator, Room B-88, Student Services Center, University of New Mexico, Albuquerque, NM 87131-1231.

PUBLIC EDUCATION GETS A LITTLE MORE PUBLIC IN SOUTH **CENTRAL WASHINGTON**

An expansion project of the RECA foundation will place public education/public access terminals (kiosks) in 14 high-traffic places such as the local Washington State University campus, public libraries, senior centers, and chambers of commerce. Free Internet access, information services such as the National Public Telecomputing Network (NPTN) K-12 Academy One programs, NPTN News Service which includes USA Today, the Washington Post, Forbes Magazine, et al., and email will be available. The RECA Foundation is a Washington based nonprofit organization which offers information dissemination through the Tri-Cities On-Line Service. The cities of Richland, Kennewick, and Pasco are each benefiting from the Tri-Cities FreeNet, a free access, community owned and operated public information service operated by the RECA Foundation. Ronda Evans, President of the RECA Foundation worked in the field of geriatrics, death and dying counseling and estate planning before entering the BBS world through the Tri-Cities OnLine Service. Her initial effort brought online services to seniors with FAQs about wills, living trusts, inventory of possessions, durable power of attorney and funeral arrangements.

A partnership between NPTN, TCI Cablevision, and local corporations will provide the kiosks under the direction of RECA. Would you like to make public education a little more accessible in your home town? Contact the RECA Foundation via your modem: 509-375-1111, via your telephone (finger driven): 509-375-3548, or via snail mail: RECA Foundation, 2950 George Washington Way, Richland, WA 99352.

[Rea Andrew Redd lives and works in southwestern Pennsylvania. He holds masters degrees in library science and history. Presently, he teaches European history, Scholastic Aptitude Test preparation, and directs the library of a private school. E-mail Rea at: REDD@GENESIS.DUQ.EDU]

Sample KIDLINK files

KIDLINK GENERAL KIDLINK MASTER KIDLINK TIPS KIDLINK SPONSORS KIDLINK QUESTION KIDLINK WIZARD KIDLINK SOCIETY KIDLINK KIDSHOW KIDLINK NATIONS KIDLINK FLAGS KIDLINK BIBLIOGR KIDLINK TRANSLAT **KIDLINK NEWS94** KIDLINK GOPHER1 KIDLINK KIDART PVN01 KIDLINK KIDART CDK07 KIDLINK GENERALS KIDLINK GENERALN KIDLINK GENERALP KIDLINK GENERALJ

KIDLINK NEWS294C

What is KIDS-95? A must for all participants Document descriptions; how to get files Practical tips about using KIDLINK Lists sponsors The four questions explained KIDLINK people to ask for help KIDLINK organization overview How to get a copy of KIDSHOW Countries in KIDLINK National flags of participating countries KIDLINK biboliography Request for translation help KIDS-94 electronic newsletter #4 Specific instructions for using search tools Student produced nature drawings from Russia KIDLINK KIDART SNJO1-SNJ34 Student produced architectural and astronomical from N.J. Student produced birthday cards from Denmark Discussion group in the Spanish language Discussion group in Scandinavian languages Discussion group in the Portuguese language Discussion group in the Japanese language

Discussion group in the Russian language

Discussion groups in the Hebrew and French languages are to be added soon.

Internet Chameleon™ TCP/IP FOR WINDOWS

Gopher Nitwithern Telest Fifty Whole From Fro Custom FFF Service FFF

5 Min. Installation

Internet Connectivity Software: Dial-Up, SLIP and PPP, **Pre-Configured** for Popular **Internet Providers**

- Installs in 5 minutes
- Native Windows installation and ease of use

Applications:

Electronic Mail (SMTP, POP) with MIME and Rules, Internet News Reader, Gopher Client, File Transfer: FTP, TFTP, and FTP Server; Telnet, Utilities: Ping, Finger. WhoIs; SLIP & PPP Dail-Up Connections

For overnight delivery call: (408) 973-7171

10725 North De Anza Blvd., Cupertino CA 95014 USA Fax (408) 257-6405



>NEW BBS INFORMATION TITLES 2#

2	SUMMER SHAREWARE SEMINARS	
	Find Your Niche	694-3
	Media Kits: The Nitty Gritty Details	694-4
	Customer Relations	694-12
	Broadening Your Int'l Horizons	694-13
	Public Relations:The Essentials	694-24
	Transforming Program Into Product	694-35
	Chicago Not the City	694-46
	Compiler Wars, 1994	694-59
	Ratings - Shareware's Major Issue of 1994	694-71
	Meet the Media	694-83
	Registration Incentives	694-96
	Shareware and the Law	694-108
	Viruses, Hackers & Shareware	694-120
	The Great Debate: An Author - Distributor Dialogue	694-121
	Resources: Those Elusive Ingredients	694-131
	Product Installation & Distribution Techniques	694-132
	Case Histories of the Pros	694-143
	Meet Your Trade Associations	694-154
	My Turn, Your Turn: A Roundtable Dialogue	694-162
0	DEALING WITH MONEY ONLINE	
	NetCash - OnLine Pocket Change for the Internet	694-25
	Credit Card Merchant Accounts for Bulletin Boards	694-33
	Credit Card Systems for BBS	694-61
	Financial Information Online	694-85
	DigiCash - Electronic \$ for the Online Community	694-99
	Merchant Accounts for BBS	 694-106
0	DATABASE/GRAPHIC/RELATED BBS ADI	
	Intro to RIP Graphics	694-41
	Database Technology Roundtable	694-54
	Intro to ModemBase Pro	694-57
	DESQview - BBS Multitasking - Tips and Techniques	694-94
	Introduction to MediaBase & Media Host	694-130
	GeneSys Network and Class	694-145
	RIP Developers Forum	694-159
	Windows Developers Conference	694-165
9	FIRST CLASS BBS	
	FirstClass - An Introduction	694-72
	Building Distributed Networks with FirstClass	694-97
	Remote Database Access with FirstClass	694-122
	FirstClass Server Advanced Clinic	694-134
	FirstClass Futures	694-146

Admidde . donorring	694-9
Information is NOT Free	
	694-14
Eloculotio i dollottii g	694-31
	694-62 694-150
Newspaper Publishing Online GLOBAL MAIL NETWORKS AND CONFEREN	
	694-47
1 Idolio Buoiso	694-65
	694-78
InterMail & InterEcho: Connecting BBS to FidoNet	694-87
Traditot Editorian Editoria	694-166
	694-133
ONOVALINK PROFESSIONAL	694-98
mili duddion to novamini, romania	694-109
SURVEY OF BBS SOFTWARE	001100
	694-82
	694-126
Edia BBo doithaid, Bod to dollar mid mid	694-137
II KIO (OT OWOLDE)	694-144
intro to TOX DDG	694-157 694-161
VMP: Voice MarketPlace, a Voice BBS USER SOFTWARE AND THE CALLER INTERI	
	694-63
	694-70
	694-77
TORK TOT BOO GITG TTITIGOTTO	694-101
	694-110
THE MAJOR BBS	694-52
	694-58
mao to ale major bbe	694-86
	694-103
	694-118
Time i dity contrain for the major ===	694-149
Biloot ii Comitodavity io. majo. ===	694-153
Botoloping / tad one let maje.	694-167
OPC BOARD	694-36
comg. c board rimes and a	694-50
1 Oboard 10.2,11 Lo o.o dilat o ilian	694-60
	694-74
Advanced Obourd Ob no.	694-84
miliodicularitor observe	694-95
Dogiming og	694-116
	694-119 694-133
PCBoard and the Internet WILDCAT! SYMPOSIUM	034-133
	694-7
miliodadolion to madaling comme	694-17
	694-28
Thiroddollori to Wildod: 1.0	694-38
Maranood Econ at trinacan in	694-51
WOOM TE COMMODERING THE COMMODER TO THE COMMOD	694-64
QIIIOGOIII IOIOI DOO	694-75 694-88
QWOODINT TO TO THIS OF THE	694-112
WOI TO G HOLLES THE COLUMN THE	694-100
wcCODE Custom Online Dev Engine Intro	694-124
WOOGBE TTOMANDE	694-135
Making money reasons and	694-147
Echomail Processing for Wildcat THE BREAD BOARD SYSTEM-TBBS	694-172
	694-56
marodaotion to 1220	694-80
II / IB The internet retector reapter	694-89
	694-104
and the same of th	694-111
TDDS Trogramming Clinic II	694-123
1220. 0111021100110110	694-140
	694-142
Connecting TBBS to UUCP-PIMP	

4	LEGAL AND SOCIAL ISSUES ONLINE		
	The Bad and the Beautiful		694-8
	National Center for Missing & Exploited Children		694-11
	Women Online		694-15
	Check and Balances in Cyberspace BBS Law 2:Privacy and Encryption		694-21 694-26
	Software Piracy Issues		694-48
	BBS Law 3: Electronic Property Rights		694-68
	BBS Law 4: Responsibilities of System Operators	[694-69
	Freedom and Privacy Issues Online		694-90
	BBS Law 5: Business Arrangements Online	[694-148
4	Dynamics of Women Online DPC COMMUNICATIONS TECHNOLOGY		694-156
	CD-ROMS and Bulletin Boards		694-5
	ZModem - File Transfer for the Millenium	Г	694-37
	How It Began - The First BBS		694-39
	Digital Velocity - ISDN Advantage for BBSs		694-44
	V.34 Modem Standard		694-66
	Future of Modem Technology Roundtable		694-73
	Data Compression Theory and Techniques Online with OS/2		694-113 694-125
	Promoting Your BBS by Satellite		694-129
	Memory Management Using QEMM	Г	694-158
40	BUSINESS AND GOVERNMENT APPLICATION		
	Building Online Business Applications		694-6
	Running a BBS for Non-Profit Organizations		694-2
	Building an Online Civic Network Missiles Into Modems		694-16
	Technical and Operational Issues of Govn't Online		694-30 694-53
	The BBS as a Service Bureau		694-92
	VARS and the BBS Industry		694-117
	Electronic Conferencing and Business Applications		694-164
700	INTERNET CONNECTIVITY		ansier
	Internet Access via CompuServe		694-20
	Internet 102 - Common Applications and Conventions Mac Internet Servers - Panel Discussion		694-19 694-23
	Internet - History, Statistics, Direction		694-34
	Internet Access/Leased Line Basics		694-43
	MacIntosh GUI BBSs and Internet		694-49
	UUCP Pverview, Tips and Tricks		694-45
	BBS to Internet Using Linux and Novell		694-93
	Internet Infrastructure		694-102
	LINUX Installation - An Inexpensive UNIX for PCs Internet Servers - A Panel Discussion		694-114 694-115
	Convergence - The Commercialization of CyberSpace		694-128
	Internet 101		694-170
	Searching & Retrieving Information on the Internet		694-171
3	HOW TO MAKE MONEY WITH A BBS	oles-	Doggan
	How to Make Money with a BBS - Jack & Phil Show		
	How to Make Money with a BBS II - Jack & Phil Show Roundtable I: Technical Aspects of Pay BBS		694-29 694-55
	Roundtable II: Business Aspects of Pay BBS		694-67
	Marketing Your BBS		694-76
	Roundtable III: Creating a Worthwhile Service		694-79
	BBS Business Plans		694-105
	Marketing Your BBS Through Newsletters & Seminars		
	Chat/Social BBS Success Roundtable I Chat/Social BBS Success Roundtable II		694-127
	How to Make \$ With the Internet		694-138 694-139
	Direct Marketing for BBSs		694-151
	Prodigy War Stories		694-152
0	MISCELLANEOUS		o to be to the same
	Welcome to ONE BBS		694-168
			694-169
			694-10 694-22
			694-22
	Stand Out in Cyberspace - The Making of a Good BBS		
	Care and Feeding of BBS Lists		694-81
			694-136
			694-141
	Searchlight II		694-163
			ASSESSMENT OF THE

	CALL TOLL FREE	1-800-241-7785		
NG	1-9 Tapes	\$ 7.00 each		
PRICING	10-over Complete Se	\$ 6 ^{.00} each \$ 799 ^{.00} each		
des 38. T	Total # of your price	tapes X per tape=		
LIEU chude li Pos	Complete ONE BBSCO Audio Cassette Pkg. 694 (over 150 tapes)\$7\$	X		
	S	HIPPING \$5.00		
HI, AI	esidents add 5% sales tax K add \$5 UPS 2nd Day Air RNATIONAL add 20%	ANDLING		
portq bortq	TOTAL	eve's a roundry of summer from BBS and telecom pr ons in alphabetical order by h		

Check (US Funds from US Bank Only)
Check#
□ UPS / COD \$5.00 (Pay on Delivery)
UISA M/C AMEX
Credit Card #
Cardholder Name:
Exp. Date//

Company Name	(Ad Code #69425)
Your Name	TOWN CREATE THE STATE OF THE CREATE THE CREA
Address	Apt / Floor / Suite
City	State
Zip + 4	data compression software for-
Phone # ()	FAX # ()



THE ONE BBSCON RESOURCE LINK®

3139 Campus Dr, Suite 300 Norcross, Georgia 30071-1402 FAX 404-447-0543

MACINTOSH NEWS

VENDOR ROUNDUP



by Bill Gram-Reefer

Here's a roundup of summer news from BBS and telecom product vendors in alphabetical order by height:

ASCENT SOLUTIONS INC. (ASI) has released a new iteration of PKZIP for the Mac. PKZIP Mac, is a Macintosh version compatible with the widely used data compression utility pretty much standard in the DOS world. During its introduction, PKZIP Mac is specially priced at \$54.95.

Ideal for work situations requiring cross-platform file transfers that can handle a variety of file formats, ASI claims that the product compresses most data 50-90 percent through an advanced deflation algorithm. Features include 100-percent PKWare patented technology and total compatibility with PKZIP DOS 2.04; 32-bit CRC error checking to ensure data integrity, and full PKZIP data encryption implementation. ASI creates, sells, and supports data compression software for customers around the world for companies, governments, and educational institutions. They also support compatible compression products for AS/400, DOS, MVS, UNIX, and Windows.

At this time there is no free client that can be used strictly for unzipping files ala Compact Pro and Stuffit, but there are plans for such a blade to help sell the razors. For product information contact **Ascent Solutions Inc.**; 10460

Miamisburg-Springboro Pike, Dayton, OH 45342; (513) 885-2031 voice; (813) 885-2032 fax; or (513) 885-2033 data.

THE FREESOFT COMPANY, maker of White Knight Telecommunications Software for Macintosh has announced version 12 of the venerable communications program for Macintosh. To celebrate the 10th anniversary of the product, Freesoft is shipping version 12 at the same price as version 11, \$139. Upgrades from version 11 are \$40; Version 10 users can upgrade for \$55, while upgrades from still earlier versions are \$65. This goes way back!

Claiming over 100 new features, White Knight now includes support for System 7 and Pro, and Power Macs, support for Apple's Communications ToolBox, File Transfer Manager, and even third-party NuBus and SCSI serial devices. New terminal emulations include support for VT200, VT220, TeleVideo 912, 920, and 925, and full support for PC-ANSI color screens, and implementation of CompuServe's Quick-B file transfer protocol. The product includes a 280+ command Procedure Language with the ability to manipulate editor windows, play sounds, compress files, create batch files from folder contents, stuff files, and support AppleEvents and AppleScript. BASIC programs can also run in conjunction with White Knight.

A lot of attention was given to enhancements of the interface as well. Users will find a restructured menu bar and a floating window for the macro editor. The status bar has also been enhanced to add shortcuts for changing settings files and terminal emulations. Freesoft also publishes a BBS construction system software for Macintosh, version 3.0 of Second Sight was released in January of 1993.

Contact **The Freesoft Company** at 105 McKinley Road, Beaver Falls, PA 15010; **(412)** 846-2700 voice; **(412)** 847-4436 fax.

INTERCON has released Worldlink version 2.0 for Macintosh, which adds the ability to read and post to newsgroups and hefty new administrative functions to its all-in-one package that combines an Internet address, integrated automated client software, access to Internet mail and FTP for one low-ish monthly fee. I like this well-documented on-ramp software and service, it is a solid piece of work that

takes (almost) all of the pain out of learning how to get on on the superduper information highway without getting lost or run over.

The basic features of WorldLink provide easy configuration where you select your port, modem setup, number to dial, and password entry. Write your messages and respond to previous mail, fill in the blanks for FTP file transfer, and hit OK. The program automatically dials the service number, logs you onto der net, sets up the stream, processes your outgoing and incoming mail, and sends your FTP request for download during a subsequent call. All the while, little windows show the progress of your call, what the program is doing, and then, when all of the tasks are completed, it logs you off. Then you can read your mail, news, etc.

A new feature lets you participate in the thousands of newsgroups available on the Internet. New administrative features let you sort messages globally or individually, archiving and sorting messages is supported, and background color is also now user selectable. You can even direct the program to highlight messages by key word to help you wade through the morass of low-level content that, at this time, is the desert that is the Internet, dotted as it is with too few meaningful oases of valuable information.

Prices for WorldLink vary according to the type of service you subscribe to. \$9/month gets you up to 2400-bps access but no newsgroups. This is the Lite service, which also provides a 9600-bps option for \$19/month. Basic Service, which includes newsgroups starts at \$19 for 2400-bps links and \$29/month for 9600-bps. Wireless and Class-B dialup options are also available for additional fees.

There are some shortcomings to WorldLink. First, the FTP function is limited and daunting for beginners, who may have no clue what those slashes mean in host addresses, and don't even know where to call to find a file. Referring such babes to ARCHIE is not very user friendly. But on the other hand, since it's near impossible to log onto Sumex-aim these days, having the ability to place your FTP order for receipt at a later time, takes some frustration out of the process.

I have found programs such as Fetch easier to work with since you can select the host name and actually see the folder directory structure and roam around the site to browse. Of course this means having your own shell account with SLIP capabilities from a provider like Holonet or Netcom (a shell account is like basic cable; adding SLIP is like adding a converter box on top of the basic cable so you can get programming delivered in a different way, in this case, a program with some semblance of a Mac graphical user interface). These accounts can be found for around \$19/month for 14.4-bps access with a small hourly fee for the SLIP service.

Secondly, I don't care for the lack of flexibility of what account name is assigned to you; like who wants to be known as WK05156@worldlink.com. No panache at all. But, I've more recently reconsidered, since such a bizarre naming scheme can provide a level of anonymity for those who crave such a luxury.

Thirdly, with the newsgroups, you'll be hampered by the fact that you'll spend a long time downloading each newsgroup message in every group you subscribe to, rather than being able to pick and choose from messages and browsing topics. At 2,400, this could be a drag unless you learn to live with it and schedule your sessions to start as you go do the dishes or walk the dogs.

Finally, since WorldLink connections are made through the PSI network, you're stuck with the availability of phone numbers provided by that service. For instance, WorldLink is

almost useless for anyone living in the East Bay of Northern California. There are no 510 area-code numbers for local access! So users in Beserkeley, Oakland, Walnut Creek, and Honkie-Heaven must call long distance (415, 408) to get their mail. This is not a good thing. I have complained about this shortcoming to Intercon on numerous instances only to be told that, "well, we can't control that, they'll add lines in that area soon...' But otherwise, tech support was very helpful, like the time some knucklehead thought I'd want to download his 3Mb settings file without asking, so I asked tech support to zap it.

I now also have a Netcom account (with WorldLink as a backup) where connections are local toll-free calls. But, then most of my time is waiting for a connection to Netcom itself or the mail server, which has proved as frustrating as WorldLink's long-distance calls were expensive. Typical conversation here is, "well we're sorry it takes so long for you to connect, but your Walnut Creek, California number is used for overload from Marin County, since we haven't been able to predict or keep up with the demand, and blah blah blah...'

But, to borrow Rickard's over-used line, "that said" (or some variation), WorldLink is still worthy of consideration, particularly by the new user that wants a fixe prix introduction to the joys of internetworking. Travelers and roadsters, too, will like its ability to act as your Internet on-ramp while away from command central with the ability to select an access number from wherever.

Just be sure they service your local area, take it easy on the newsgroups, learn to wallow in obscurity, and be prepared to have toadies snicker at your call sign.

The BIG PICTURE? There are IP services that need a SLIP or PPP account like Fetch and Gopher. But with a 14.4 pipeline, you're really not missing much by not being able to play with Mosaic. Eventually, Macintosh users should get an account other than Worldlink if only so they can use the TCP/IP capabilities of NovaTerm, FirstClass, and TeleFinder clients that will provide ever-increasing connections to hosts reachable over the net. And when you do get a "real" account, Intercon's TCP/Connect II will be waiting, providing terminal emulation, FTP, mail, and news reader all in one package to save you the effort of procuring Apple's MacTCP, Dartmouth's Fetch, Qualcomm's Eudora, and Norstad's NewsWatcher for yourself.

Intercon, (orders) P.O. Box 592, Herndon, VA 22070; (703) 709-5520 tech support voice—ask for sales info; (703) 802-2004 fax; tech@intercon.com Internet.

A sneak preview of RESNOVA's new NovaLink Windows client during Mactivity indicated good progress toward being available real soon now. As Alex Hopmann explained, "this will be a real cross-platform client." One bit of evidence to prove his point, the Windows client will transfer files from Mac hosts to remote Windows users in the right ISSO file format so Windows users won't lose file information, while

ATTENTION BBS OPERATORS

Introducing the NetBank Payment System Electronic Money for Merchants on the Information Superhighway

Imagine...

- mation products using electronic mail or a bulletin board system.
- customers via electronic mail.
- · Buying and selling products and services by exchanging electronic money as payment.

Welcome to the NetBank

- system that allows anyone to spend and accept electronic money.
- ment coupons, called NetCash, that are universally accepted by everyone participating in the NetBank • For the automated info server: system.
- Selling and distributing infor- The NetBank is an on-line payment NetCash is the "electronic pocket change" carried by travelers on the Infobahn.
- · Collecting payment from your · The NetBank uses electronic pay- · For general information and questions, please send e-mail to: info@agents.com
 - netbank-info@agents.com

The NetBankSM is operated by Software Agents, Inc. • P.O.Box 541 • Germantown, MD 20875

The Barrier Breaking, Multi-Line BBS!

Break the performance barrier!

Today you may want to start a single line BBS, but you dream of rivaling CompuServe someday. TSX-BBS™ will take you there. TSX-BBS supports up to 256 serial ports on a single PC using intelligent serial multiplexers. Multiple PC's can be networked together for even larger systems.

Break the productivity barrier!

TSX-BBS is the only system that lets the sysop run DOS programs, view GIF's, do file maintenance, even take a break with "DOOM", while the BBS is live on the same PC. You can even process incoming satellite data including Usenet feeds and add it to your board in real-time.

With the TSXTERM communication program that is provided with the system, your users can download files in the background while they continue to use the board at the same time. Other communication programs are also supported, of course.

Break the isolation barrier!

Unlike other packages, TSX-BBS does not leave you isolated. With TCP/IP, Telnet, FTP, and NFS options, TSX-BBS integrates seamlessly into your corporate LAN and the Internet. TSX-BBS is your gateway to the Information Superhighway.

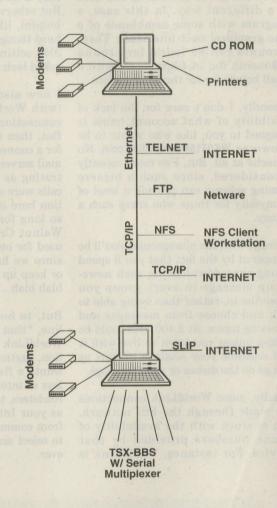
Break the multi-vendor barrier!

When you buy TSX-BBS you get a complete, integrated system. TSX-BBS includes a world-class multiuser, multi-tasking environment with built-in 32-bit memory management, preemptive task scheduler, disk caching, and optional networking. The system comes complete with file librarian, mail, forums, voting, QWK, classified ads and RIP support, all without having to buy third-party add-ons.

Break the customization barrier!

Don't let your users down. You can enhance and upgrade your system while it is running continuously, 24-hours a day. Modify and create new menus, integrate text from ANSI editors, and change the menu tree structure without tak-

TSX-BBS



ing the board down. For advanced customization, use the powerful, C-like TPL programming language to create your own applications. TPL is a complete programming language, with built in BBS functions, I/O, and scripting. Or, you can use your own favorite language to develop "door" applications for your board.

Break into the future!

Call or FAX now for more information.
Phone: (615) 327-3670, FAX: (615) 321-5929
Internet: 71333.27@compuserve.com
BBS (615) 320-1820

uploads to the Mac host will be transformed correctly - a neat touch.

Also, the splash screen for the demo included a spinning globe, not a tiedyed Planet locked motionless in space; meaning support for QuickTime in the client! Cool, but one down side may mean having to download 5-Mb client files containing QT-enhanced graphics? We'll see these and other new features in the coming upgrade. ResNova Software is located at 5011 Argosy #13, Huntington Beach, CA 92649; (714) 379-9000 voice; (714) 379-9004 NovaWorld support bbs.

SOFTARC, too, announced upcoming plans for its FirstClass conferencing system during Mactivity. News culled from Scott Welch's presentation and from chit-chat on the floor includes an announcement regarding built-in TCP/IP connectivity (which was demonstrated), a 30+ bug fix new release (2.51) of the Windows client by 9/94 which should also support viewing of PICT images and improve printing and color imports.

The ability to work off line is expected in the following client update which will also include mail quoting. Such cross platform font support demands a new text editor. Third parties can expect an improved developer toolkit by 9/94 to help write custom client extensions. The topic of client extensions provide opportunity for, among other things, Mosaic, WAIS or Telnet clients. A Common Ground-like viewer is slated for 10/94, no date was set for a new forms editor. A new SMTP gateway is being readied for November availability, to retail at \$1,995.

Probably the most interesting event of Mactivity, aside from the go cart races SoftArc sponsored, was Scott Welch's explanation and defense of its corporate policy to allow only a SoftArc-logo login screen, refusing compromise on the current policy of \$995 so sysops could have a customized login screen installed at the factory.

Please note that SoftArc Inc. has moved to brand new digs. The company's new contact information is 100 Allstate Parkway, Markham, Ontario CANADA L3R 6H3; (905) 415-7000 voice; (905) 415-7151 fax; (905) 415-7070 SoftArc Online; Its order line remains unchanged at 1-800-364-1923.

Meanwhile **SPIDER ISLAND SOFT-WARE**, in September began shipping version 3.5 of TeleFinder Group

Edition BBS software. The upgrade adds server-to-server gateways supporting multi-hop, Internet domain-name based messaging. Spider Island's NetConnect TCP, a \$295 connection tool allows hosts to easily make TCP/IP links to the net while the client portion of NetConnect is bundled with TF/User, the freely distributable client program that comes with TeleFinder Group Edition, and is also included in TeleFinder Pro. Spider Island's full-featured shareware terminal emulation package. Additionally, ISDN and X.25 connections via the Communication Toolbox are now built in, and improved support for Windows users was added including the ability to create threads, printing and interface enhancements, and a status bar.

Full-text searching using AppleSearch now comes standard. On hosts that contain an AppleSearch server mounted as a volume, TeleFinder clients will be able to search the volume using the Find feature built into the Mac and Windows client software. The company will also begin shipping a UUCP gateway that manages Internet Mail and News.

To retail at \$425, TeleFinder Version 3.5 contains both Macintosh 680X0 and Power Macintosh binaries of the BBS software, including the host and administrative modules. Upgrades from previous versions purchased prior to July 1 are \$95. Suggested retail price for the UUCP gateway is \$200. Spider Island will also support the formation of TFNET, a TeleFinderbased network linking hundreds of TeleFinder systems to share files, conferences, mail, and chat over the Internet. Based in Irvine, California. Spider Island Software can be reached by voice at (714) 669-9260. Support BBS is (714) 730-5785.

[Bill Gram-Reefer, based in Concord, CA, is president of **WORLDVIEW**, specializing in connectivity and communications. Bill has been writing about Macintosh computers since 1984. E-mail Bill at: reefer@netcom.com]



ER BBS DISCOUNT

\$89.00

\$189.00

\$85.00

\$579.00

\$155.00

\$345.00

CALL!

\$94.00 CALL!

\$99.00

CALL!

Wildcat Single Line Wildcat Multi Line (1-10) Wildcat Pro Utilities

Wildcat IM Major BBS V6.2 2-User

Major BBS 8 User Bundle

All Major BBS Add-ons

Omodem Pro for Windows

Digiboard PC/8e and PC/4e

Modembase Pro (Database)

Searchlight BBS

Call Now! Much more!

Order 24 Hours!

Voice Line: (800) 597-6160

Order/Info/Faxback on our BBS!

BBS: (909) 682-1654

On-Line Services

3839 Brockton Ave Riverside, CA 92501

Tech Sales: (909) 789-7358

Visa, Mastercard, Discover, COD. P.O.'s from Government Agencies and Fortune 500 Companies Welcome!

DIGIBOARDSTM

BOCATM - STBTM

MODEMS

PRACTICAL PERIPHERALS

Boca • Supra • Hayes

IDE/SCSI Drives

INTERNET CONNECTIVITY

BBS HARDWARE BRAD THEISSEN • 507-625-5744 **ORDERS 800-821-5456** Fax 800-625-1954 UPS/FEDEX 1-2 DAYS · VISA/MC/DISCOVER

BBS HARDWARE & SOFTWARE

At Modern BBS, we carry only the finest BBS software & hardware in the world. With software such as TBBS, Major BBS, Wildcat!, and PC Board on our shelves, we can surely offer you only the best in both quality software and honest advice. To be sure that your software does it's best, we also carry top-notch serial hardware such as BOCA, DIGI, and GTek. And we offer everything at the guarenteed lowest prices... at least \$5 lower then any other lower price you may find. This is known as our "\$5 Price Barrier". To compliment our line of BBS hardware and software, we also stock accessories such as BBS Ready CD's, BBS Books, Credit Card Services, BBS Add-Ons, RIPaint, and more! Call us for a catalog!!

CREDIT CARD SERVICES!

No successful BBS can survive without the ability to accept credit cards. The problem is, most banks don't even know what "BBS" means! Call us and we'll do our best to set your business up for credit card processing. Our associate credit agency is in touch with literally hundreds of banks that can let you know, without a service charge, if you are a likely candidate to be approved. Call for more details!

LET US PROVE OURSELVES!

Telnet to us: superstore.microserve.net (modern-bbs at login:) Catalog via Internet: Send msg to catalog@modern-bbs.com Join mailing list: Send address to address@modern-bbs.com

VOICE (215) 638-1424 FAX (215) 244-9214

SALES BBS (215) 638-1299



Free UPS AIR Shipping On Software Items! (US)

TBBS/TDBS Major BBS WildCat PC Board GTek, Inc DIGIBoard BOCA RIPaint TBBS Books TDBS Apps **BBS** CDs IC Verify **Book Titles**





Imagine...

a continuous stream of data flowing into your BBS NON-STOP, 24 HOURS A DAY! Imagine having daily access to almost any conference network and INTERNET/USENET news group.

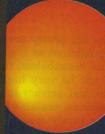
Imagine your long distance phone bills dropping as much as 80%... or more!

Monthly Subscription Rates for \$30.00 per mo. Call Today for Satellite Dish/Receiver Leasing or Purchasing Information. Systems start as low as \$495 or \$18.50 per month.



FTERNOON HIGHS





NC RADAF THIS HOUR

Some of the

PLANET CONNECT DATA FEEDS:

RIME, Fido-Net (Conferences & File Areas). NaNet, Major Net, ILink, RoseNet, Intelec, U'n'Inet, Planet Earth, City 2 City, Microsoft, Echo-Net, SmartNet

Internet/Usenet News Groups

National Weather (satellite, radar & maps)

USA Today Decisionline National TV Listings

And More Added All The Time!

Availability of some Net material is suject to Net approvals. Membership in the Nets must be obtained through the Nets

Satisfaction Guaranteed!



Easy to Install, Low Maintenance

Voice: (615) 623-8300 Fax: (615) 623-8751

BBS: (615) 623-8111

FidoNet: 1:3615/50



LEGALLY ONLINE

A TAP ON EVERY PHONE: THE DREAM OF EVERY FBI AGENT



by Lance Rose

Wiretapping is illegal. So why is there a bill pending in Congress to make federal wiretaps as easy as turning on the kitchen faucet? Even stranger: why does nearly everyone on Capitol Hill think this bill, known affectionately as "Digital Telephony" (and officially as H.R. 4922 and S. 2375), was a done deal while still in committee? Digital Telephony's known constituency begins and ends with the FBI and the Justice Department, numbering between them a measly few thousand citizens led by career politicos entranced by the game of cops and robbers. What about the rest of the American public? Will we, in our hundreds of millions, get a chance to weigh in on possibly the most privacyinvasive legislation ever imposed in this country? Unless we all act immediately, probably not.

Washington, D.C. is a town where votes mean everything. Congressmen usually shy away from laws that might be unpopular with their constituents back home, at least if they have ambitions foranother term. Think of bills to raise tax rates. Digital Telephony has the potential to be nearly as unpopular.

In a nutshell, Digital Telephony would require all telephone companies to develop and install wiretapping jacks in all their switches. Any time a government agent shows up at the phone company office with a judge's order permitting them to eavesdrop on someone's line, they can jack right in, no sweat. What's the problem with that? Only this: we already have a federal law in place pointing the other way. The Electronic Communications Privacy Act (ECPA) says government wiretapping is so awful it is flatly illegal, except in those rare cases that a judge can be convinced a wiretap is absolutely necessary to help investigate a crime. The ECPA is more than just a law. It embodies and symbolizes the American public's abhorrence of clandestine wiretapping, keenly felt ever since the abuses of Watergate in the 60s.

The new Digital Telephony bill seems drafted by folks blissfully ignorant of the meaning of ECPA. The ECPA made it real hard to get wiretap orders. Digital Telephony, focusing on making the actual wiretap real easy, reduces the ECPA's protection from a fortress of personal privacy rights to a pesky formality.

Available indicators are pretty scarce for a bill as underpublicized as Digital Telephony. It seems, nonetheless, that the public would not be very happy with this law. The last privacy-invasive government agenda explained to the public was the justly maligned Clipper chip. Clipper is a device that enables people to encrypt their telephone discussions, but with a trap door allowing the government easily to find out what was so important they encrypted it. Polls on the public's opinion of Clipper revealed no support, but plenty of loathing of a government that wants to peek into every corner of peoples' lives. Clipper has also been attacked in the press, and in public relations and related legislation by various high-tech industry groups. Digital Telephony, like Clipper, is really just a piece of the larger project of seeking to turn the U.S. into a "surveillance state." For that reason, it could well be regarded as equally loathesome by the public (What else goes into the recipe for a surveillance state? How about personal identity cards, placed on the national agenda by our friends in charge of this country's immigration policy?).

You can also take your own informal poll, guaranteed to entertain. Ask your friends if they ever heard of Clipper and Digital Telephony, and ask what they think of these government agendas. Chances are slim that they heard of both. Even if they heard of Clipper, they probably know little

more than that some people are saying it's a bad thing. Now, explain both Digital Telephony and Clipper to them, and emphasize that they are both part of a larger design by certain law enforcement agencies to reduce our zone of electronic privacy to zero. If your audience is anything like mine, their eyes will widen as they perceive the connection between distant beltway shenanigans and their dwindling hopes of privacy on their own phone lines, culminating in the only rational response: a grunt of disgust. And if they are Democrats, you may find them wondering if Bill and Al were always this creepy, or they just got that way after rolling into the White House and the confidences of our chief spook agencies.

Whoops, almost forgot — there is one last, really good reason people wouldn't like Digital Telephony if only they knew about it: we will all pay for the digital spigots the government wants to install with our taxpayer dollars. Less money for such things as improving our public schools, and one more reason not to reduce our federal taxes. Previous versions of the bill required the telephone companies to shoulder the burden. Big deal, the public would still pay through increased phone bills. Any way you slice it, the big project of giving the government the ability to wiretap with ease costs real money. Estimates right now range from a low of \$500 million (the optimistic law enforcement projection) to several billion dollars. Who better to pay that bill than you and me, the eventual targets of the very surveillance power we're being asked to fund? Hey, I've got an idea - take every dollar for this project out of the existing funding for the FBI and our other intelligence agencies. Nah, that makes too much sense.

Building in easy wiretap access has another implication down the road. All future telephone network and switching development would need to take account of the government's desire to eavesdrop anywhere it wants. No one can predict what effect this requirement might have on the direction of future technologies. It's a skewing influence, though. A free market encourages development of communications technologies that make it easier for people and providers to send and receive information. A wiretap-access rule, on the other hand, always brings the issue of eavesdropreadiness to the fore, forcing tradeoffs

against optimal information transmission solutions. Costing more of our gross national product to achieve network efficiencies, bringing to the fore the question of what is our society's goal: social progress, or voyeurism by our supposed protectors in government? Perhaps to some of our elected representatives and their civil service comrades, these two propositions are one and the same. Not to me.

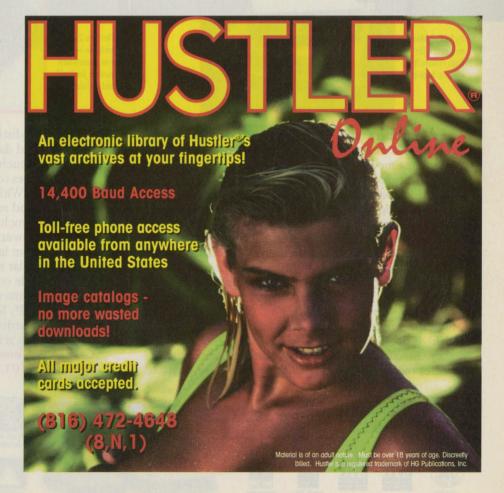
Digital Telephony does have its supporters, law-and-order types like the FBI. How do they justify this law? They complain to Congressmen that they can't execute court-authorized wiretapping orders any more, because the technologies used to carry discussions are too hard to tap into. For the past few months, they've been saying they can document 100 or more instances where their agents came up croppers on wiretap attempts. Lately the number seems to have crystallized: 183 documented failures at executing court-authorized wiretaps. Supposedly documented, actually: the FBI refuses to disclose publicly any descriptions of the failed wiretap attempts. We're supposed to assume, it seems, that disclosing such information to the public might endanger innocents, or ruin ongoing investigations, or perhaps tip off the bad guys that certain kinds of phone calls or digital discussion are immune to federal wiretaps. And of course, we're supposed to agree that it's a given that our own government should always be able to look in on our private affairs.

Normally, we need not begrudge the FBI and Justice Department their secrecy games. Let 'em keep their little failures secret, and hopefully they will try harder to pay attention the next time one of their successful eavesdropping efforts dumps advance notice of a World Trade Center bombing in their laps. But here, we're being asked to submit to the biggest privacy-compromising technology project in history, and we're not permitted to know why it's necessary. We're not being allowed to scrutinize the 183 examples used by the FBI as support for Digital Telephony. If we could see these examples, perhaps we would all agree with the FBI. Who can say, because we don't know what the examples are. Or perhaps, a close look at the examples would show the FBI is blowing smoke. How many serious crimes were committed because of the supposed wiretap failures? In how many cases was the FBI capable of coming up with the necessary information or evidence through alternative

means? How many cases involve delay in setting up the wiretap, rather than flat inability to set it up, and in those cases, how much of the delay was based on factors having nothing to do with the wiretap effort itself? These kinds of questions need to be asked in connection with any set of examples of supposed wiretap failure touted by law enforcement. Yet we can't get started if we cannot evaluate the examples.

The FBI has used this "183 cases" ploy masterfully. They apparently filled in a few outsiders on some of these cases of wiretapping failure, most notably Senator Leahy and Representative Edwards, up to now two of the strongest forces protecting our electronic privacy rights in Congress. These politicians went behind closed doors with the FBI to see what the problem was with wiretapping, and when they emerged, they supported Digital Telephony! These guys are now helping to push Digital Telephony through Congress. How compelling two of the main defenders of our privacy rights in this country, turned around by a demonstration that our national security apparatus is breaking down because wiretapping is getting harder.

Not in this corner. Once you get politicians in a closed room, who says the meeting has anything to do with a polite discussion of wiretapping problems? Horse trading, blackmail, calling in favors — this is the normal stuff of discussions among politicos. And at the end, they can all agree to call it a meeting where Leahy and Edwards hopped on board when they were convinced by the FBI's examples of its wiretapping woes. If any of you reading this don't like these speculations, I beg you to prove me wrong. Let's see those 183 cases. Oh, there is a little rumor floating around about the real card the FBI and Justice Department played. It seems they had the potential support of one of the more powerful demagogues in the Senate for Digital Telephony, who was prepared to ride the rough beast through Congress like some superhigh-tech version of the crime bill that was just passed. Under this scenario, Edwards and Leahy signed on to shepherd a kinder, gentler version of the bill themselves, to head off the far worse law that might result by the time the demagogoue was done terrorizing us all about the dangers of having a little personal privacy.



There Are Two Times When **Modem Reliability Is Critical.**



Some modem users don't care if their data gets hung up, transmits inaccurately, or if they have to redial several times. Most modem users do. For them there's ZyXEL, the full-featured fax modem for serious users.

ZyXEL land and cellular modems get through where others fail. They're specially designed to overcome poor signal conditions on the physical layer with features like fast retrain and auto fall-forward/fall-back. This means ZyXEL modems connect the first time and continue to transmit data accurately at ultra-high speeds up to 19.2Kbps* over land lines (with DTE speeds up to 76.8Kbps) and 14.4Kbps over cellular networks. Fax speed is 14.4Kbps/V.17. It's the kind of performance you only expect from high-priced modems—but with ZyXEL it doesn't cost more.

ZyXEL data/fax/voice/cellular modems have more features than other modems of any price—like digitized voice capability, distinctive ring, multilevel security, industry standard data compression and error correction protocols, and much more.

When it comes to cellular, no other modem comes close to ZyXEL. With the ZyCellular option, your modem is not just fast and reliable. It will also communicate in asynchronous/synchronous mode at 14.4Kbps. The ZyCellular autoswitch capability automatically switches your modem from land to cellular when land connections are lost. ZyCellular is the ideal backup for leased lines as well as for mobile communications.

ZyXEL modems work in all environments — DOS™, Windows®, OS/2®, Macintosh®, NeXT®, UNIX® and Amiga™. So get serious about saving time, cost and effort with true modem reliability. Don't wait.

Call ZyXEL now-800-255-4101.



















4920 E. La Palma Avenue, Anaheim, CA 92807 (714) 693-0808 FAX: (714) 693-0705 BBS: (714) 693-0762

See Us At One BBSCON '94 Atlanta, GA, Aug. 17-21, Booth #140

All trademarks are the property of their respective owners.

PLUS Series only. Specifications subject to change without notice













Leahy and Edwards' sponsorship of Digital Telephony threw the Washington-based civil libertarian groups into disarray. Some, most distinctively the Electronic Frontier Foundation, chose to work with the bill and its normally privacy-friendly sponsors. In fact, Leahy invited the EFF to help shape Digital Telephony into a compromise bill that would take into account our rights to privacy. They accepted, and the resulting draft is being pitched as an acceptable compromise between the needs of law enforcement to listen in on bad guys, and the needs of the hundreds of millions of the rest of us to know big brother is not looking over our shoulders. The EFF did achieve two notable changes. First, they had some of the language of the bill changed, so it is now clear that only telephone companies and other switch operators would have to provide wiretapping facilities for the government. Before the change, it looked like a real possibility that all online services, even small bulletin boards, would also have to provide wiretapping facilities.

The other change is in the requirements for legally obtaining "call-identifying information." Under the earlier version of Digital Telephony, and in fact under the law as it exists today, government agents would have been able to obtain information on who called who (though not the contents of the discussions) under a subpoena, which is far easier to obtain than a court order. This call-identifying information can be damning, since it enables agents to find out about a person's circle of acquaintances, in widening circles of phone calls placed from person to person. For abuse potential, think how useful such information, obtained through more primitve means, was to Sen. McCarthy in the '50s. With the EFF's input, the bill was changed to require agents to obtain a court order before seeking call-identifying information, which would greatly reduce their use of this particular surveillance device.

Other Washington-Based civil liberties groups, most notably EPIC (Electronic Privacy Information Center, a successor to the Washington branch of Computer Professionals for Social Responsibility), are fighting to prevent enactment of Digital Telephony in any form. For these groups, watering down Digital Telephony does nothing to combat its real threat: installing universal wiretap capabilities that can structurally transform our country into a hardwired surveillance state. This is the real goal of the bill; we must presume the FBI knew their baby would be compromised a little

before passage, and patched on some provisions as inessential break-off parts. EPIC doesn't believe Digital Telephony is a done deal, despite the feeling on the Hill, and they may be right. An earlier version of Digital Telephony was shot down in committee a couple of years ago. Perhaps, if we all sharpen up our aim a bit, this one can be brought down too.

The EPIC approach offers the choice of fighting for our rights, instead of fatalistically trying to make a bad thing less so. It appears the EFF itself is sympathetic to the EPIC position. They've stated publicly that despite their cooperation in shaping the current version of Digital Telephony, they're poised to back off it altogether and join the fight against it if it turns out the public wants no part of this law.

If you want no part of this law, you must act immediately. Tell your local Congressmen and Senators that H.R. 4922 and S.2375 must never be passed. If they don't know what you're talking about, refer to the "FBI Wiretap Bill." Law and order is important, but it does not require that we all give up our telephone privacy to the FBI and every other spy agency in existence. Remind them that wiretapping is illegal, so there is no need for a law to make it

easier. In addition to your own Congressmen, you may want to contact Rep. Jack Brooks, Chair of the House Judiciary Committee, at 2138 Rayburn House Office Building, Washington, D.C. 20515, (202)225-3951 (voice), (202) 225-1958 (fax). While you're at it, if you would like to get in touch with EPIC, the privacy protection fighters, you can call them at (202)544-9240, or e-mail them at info@epic.org.

Hopefully, the normal delays of magazine publishing won't make this plea too late. This is the first issue of Boardwatch for which a story could be written following the announcement that Digital Telephony is imminent (and Boardwatch has unusually short lead times for a monthly), and there are reports that it could be pushed to a vote as early as mid-September. If there's any time left when you read this, act now!

[Lance Rose is an attorney and writer practicing high-tech and information law in Montclair, NJ with the firm Lance Rose & Associates. He can be found on the Internet at elrose @path.net, and on Compuserve at 72230,2044. He is also author of SysLaw, the legal guide for online service providers, available from PC Information Group at 800-321-8285. - Editor]

10¢ /Day To Add Nation-Wide Classified Ads For Your Subscribers.

Now BBS's have something NEW and HOT to offer to their subscribers. Traders' Connection annouces hundreds of classified ads of computer equipment from around the country, updated weekly, for BBS's to offer to their subscribers. Any BBS can call Traders' Connection and for a small download charge of \$36 per year, show these classified ads to all their subscribers on their bulletin board.

As always we offer callers a FREE on-line tour through hundreds of thousands of classified ads and more right from their own computer. As a "GUEST," buying or selling, they can shop for fun or request a 'Global Search' to locate specific items from over 500,000 ads. All from their computer and all FREE with no long distance charges using any of our 624 local access numbers. Call the numbers below for more details.

1-800-753-4223

Voice Info & local access #'s



1-317-359-5199

On-line & Local # Info (14.4k 8N1)

Power Up
The Classified World Network

FREE ACCESS

Never a charge! Never a charge!

Dial into America's newest and hottest BBS.

Totally unbeatable one-on-one and partyline action.

Great multiplayer Games.

32 Lines! Major BBS V6.2

Thousands of Downloadable files -FREE!

Multiuser Teleconference!

On-Line Match making!

Also mega shareware files, multi-user games, sizzling gif files and hot message forms.



Make Your Modern Smoke! Call Now!

1-715-758-1000

Why do the others cost so much?

800-633-6636 or 909-780-8860 Call Now!!



ModemBase Pro Puzzled about On-line Databases? Wildcat-Major-Searchlight-PCBoard-TBBS-Others **On-line Catalogs** No Programming Required Picture/Image Databases Basic PC Knowledge is all you need Classified ad's Listings Simple databases on-line in minutes Real Estate Listings Full MultiUser & Network Ready **Text Search Databases** Completely Customizable RIP - ANSI -VT-Most Terminals Supported **Knowledge Bases** Supports all file/image types as attachments Group/Event/RSVP Calendars Download/Upload file support Order Entry/On-line Purchasing Upload and append to databases Limitless information gathering **Integrated Solutions** ModemBase Pro can do all of this for \$149.00!

2995 Van Buren Blvd.

Riverside CA 92503

A13189

BBS INCOME

Free Report on how to go from \$0 to \$3,000 per month in BBS income in as little as 90 days!

This valuable report reveals money making information on how to operate a BBS for profit. It outlines powerful marketing secrets including unique ways of finding new subscribers and how to get them to pay you top dollar; guaranteed ways to generate other revenue plus the secrets to getting free publicity and being able to accept credit card payments; plus much more. Limited quantity.

56089 29 Palms Hwy. Ste 254-B10 Yucca Valley, CA 92284

1 (619) 228-9653

FAX 1 (619) 369-1185

Prepared by the publishers of the book - How To Successfully Run A BBS For Profit.

allas Remote maging

Satellite Image Consulting

Jeff Wallach Ph.D., President

P.O. Box 117088, Carrollton Texas 75011 - 7088



ON-LINE SINCE 1985

The DRIG BBS is the premier source of information on Satellite Tracking, Satellite Imagery, Telemetry Analysis, Tracking Programs, Satellite Databases, NASA, Space Communications AND MORE!

Over 7 GIGABYTES of files related to Astronomy, Remote Imaging, Amateur Radio, Digital Image/Signal Processing, NASA, AMSAT, and Space!

10 Lines with USR Dual Standard 16.8K Modems

Internet - info@drig.com Fidonet - 1:124/6509

- Online VISA/MC/AMEX Registration
- Internet/Fidonet via Ku Band Satellite
- Real Time Weather Satellite Images
- NASA/AMSAT Satellite Tracking Elements
- **Boardwatch/Connect/USA Today Doors**
- Astronomy Databases
- **Weather Information Door**
- Internet FTP/Telnet in 1994

1 Year Membership - Full Downloading - No Ratios \$35.00

1 Year Membership - Full Downloading - Internet \$65.00

2 Year Membership - Full Downloading - Internet \$95.00

USE VISA/MASTERCARD/AMEX or Send Check for Subscription

Internet - info@drig.com Voice: (214) 394-7325 BBS: (214) 394-7438 Fax: (214) 492-7747

FREE CD-ROM Catalog!

BBS Box MAC/DOS CD Power Box	\$45 \$16	PC Sig 13 Pier 5	\$29 \$30
CD Win Box	\$17	Pier 4	\$25
CICA Windows	\$16	Shareware Studio 5	\$19
Games 1994	\$25	Simtel MSDOS	\$16
Giga Games	\$19	So Much Modem Mad	\$26
Hobbs OS/2	\$16	So Much Shareware 4	\$26
Internet Tools	\$24	So Much Space	\$26
Linux	\$16	So Much WIN & OS/2	\$19
Monster Media 94	\$25	Software Vault Ruby	\$18
Nature Graphics	\$26	Software Vault Games	\$19
NightOwl 13	\$30	Software Vault Windows	
NightOwl 12	\$25	Source Code	\$19
NightOwl Games 2	\$16	Usenet	\$14
NightOwl Graphics	\$19	WCG The Optical BBS	\$19
NightOwl Windows	\$19	Windows 1994	\$25

ADULTS ONLY

Adult Ref. Library	\$19	Hot Hunks	\$29
Amateur Models 2	\$29	KeyHole Fantasies	\$29
Asian Ladies	\$29	Pixels Of Passion 1	\$29
Busty Babes 2	\$29	Pixels Of Passion 2	\$29
Combined Fantasies	\$29	Women On wheels	\$29

RIMDI E DEAL SI

DOINDEL	DLALU:	
NightOwl 13 & 12 \$56	Soft. Ruby & Night 13	\$45
Pier 5 & 4 \$49	Soft. Ruby & Pier 5	\$43
NightOwl 13 & Pier 5 \$52	WIN 94 & Games 94	\$49

HEY SYSOPS!

UNIROM is the Sysops choice for CD-ROMS world wide! Call us and ask to be added to our SysOp Hot Sheet. We have many more BBS READY CD-ROMS in stock

30-DAY MONEY BACK GUARANTEE

VISA/MC/AMEX/COD

UNIROM 1-800-862-2457 664-A Freeman Ln #449 1-916-477-8392 Grass Valley, CA 95949 Fax: 916-477-8390



BBS Bargains!

Special "Bundle" Prices

TDBS "Starter Kit" (CSBBS Book, TDBS 2-line, and TBBS Tips Book) \$300.00 TBBS "Rip Starter Kit" (CSBBS Book, TDBS, RIPaint, and Tips Book) \$400.00 TBBS "Big Bundle" (TBBS & TDBS 16 line, SYSOM, and PIMPOM) \$1,365.00 TBBS "Upgrade Kit" (CSBBS Book, TDBS 2-line, RIPaint, RIP Kit, SYSOM, TBBS Tips Book) \$525.00

"A La Carte" Specials

TBBS Upgrade (2 - 16)	\$450.00
TDBS Upgrade (2 - 16)	.\$450.00
TBBS 16-line	\$540.00
TDBS 16-line	\$620.00
QSO or SYSOM	\$78.00
PIMPOM v3.0	\$260.00
RIPaint	\$150.00

Helpful BBS Books

Creating Successful BBS'es \$28.00 (includes TBBS 2-line) SYSLAW \$28.00 TBBS Tips/Traps/Techniques \$28.00

Bundle of All Three Books \$69.00 Prices valid until 10/30/94

Purchase









C.O.D.

The INDEX SystemTM

To Order, Call (404) 924-8667

P.O. Box 2310, 399 Highway 90 BAY St. Louis, MS 39521-2310 U.S.A. TEK[®], INC. (80 INTERNATIONAL & TECHNICAL SUPPORT 601-467-8048 • Fax 601-467-0935

"Arguably the most flexible serial card ever manufactured." Boardwatch Magazine March 1994

"The Gtek **BBS550** works with more BBS software

packages than any other card." Reseller World - March 1994

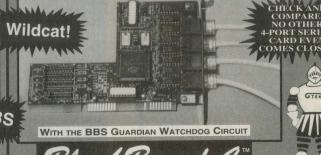
"In short, this is a top-notch product for use by any operator of a multiline BBS, one I can highly recommend."

"The way a serial card should be.'

SYSOP News... and CyberWorld Report June 1994



America de la companya de la company	Gtek BBS550	Connect-Tech D-Flex-8	DigiBoard P/C8	Quatech MS100	Galacticomm Galactiboard	Sealevel COMM+8
Channels	8	8	8	8	8	8
16550 UARTS Standard	YES	No	No	No	Yes	No
Selectable IRQ's 2, 3, 4, 5, 6, 7, 10, 11, 12, 14, 15	YES	No	No	No	No	No
IRQ's can be Shared, Separate or both.	YES	No	No	No	No	No
Full Modem Support	YES	Yes	Yes	No	No	Yes
COM 1 - 4 Compatible	YES	No	No	No	Yes	Yes
Max Data Rate	460,800	57,600	57,600	57,600	38,400	57,600
Retail Price	\$395	\$695	\$595	\$595	\$575	\$499



BlackBoard-4

	Gtek BlackBoard-4		Sealevel COMM+4		Quatech QS-100D
Channels	4	4	4	4	4
10 Conductor Full Modem Handshake Support	YES	Yes	Yes	No	Yes
16550 UARTS Standard	YES	No	No	No	No
Selectable IRQ's 2, 3, 4, 5, 7, 10, 11, 12, 15	YES	No	No	No	No
IRQ's can be Shared, Separate or both.	YES	No	No	No	Yes
Maximum Data Rate (BPS)	460,800	57,600	57,600	57,600	57,600
Watchdog Circuit	YES	No	No	No	No
Includes 6 Foot Cables	YES	No	No	No	No
Retail Price	\$295	\$409	\$339	\$495	\$350





Fashion World

Our New **Fantasy Fashion** Catalog is now Available on Disk for BBS's to Place Online!

Provide a service for your members while receiving revenue for yourself. Styles ranging from satin to Leather. Victorian corsets, Thigh high boots...from mild to wild. Contact us for more information.

Fashion World International

P O Box 277506 Sacremento Ca 95827 916 631-8777 Voice 916 631-9339 Fax

The Classified Connection BBS

We Feature:

100% Original hot Adult Graphics! The Finest Amateur Models All Southern California Girls

Plus:

The Best Online Games The Best Conferences The Best Classified Ads

Call:

(619) 566-7347 V.32bis (619) 566-0328 Compucom (619) 566-3786 Zyxel

Original:

As featured in Boardwatch June, 1992 Home of the world famous, award-winning Girlfriends

CDROM:

Don't like long distance charges? We feature a complete CDROM selection! Call (619) 566-5516 Voice / 566-3316 FAX Now Available: Giffy Gold II!

Classified Connection 9528 Miramar Rd. Ste. 277 San Diego, CA 92126

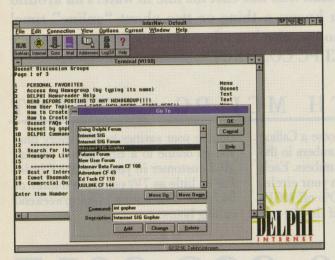


DELPHI

INTERNAV NEARS RELEASE

by Walt Howe

elphi's new Windows based software package, Internav, has gone through a successful testing period and will be released soon, probably before you read this, according to its authors. It will be available for download and soon will appear in signup packages in the stores. This is the first of several generations of software that will be released for Delphi in the months to come. The screens accompanying this article are taken from Internav. The first figure shows the use of the GOTO function, which has some preset menu items, and can be easily customized with selections of your own choice.



AIR WARRIOR IS NOW AVAILABLE

Following the purchase of Kesmai Corporation by Delphi's parent company, News Corp., Delphi has introduced the first of the Kesmai online games to Delphi. Air Warrior can now be downloaded directly, and once set up, it can be played online with full realistic graphics. Air Warrior features complex flight simulation, where you pilot or act as other crew members on a large variety of combat aircraft of your choice. You interact with other players online, and you may find 50 to 60 planes filling your airspace on both sides of an encounter. Other games will follow soon, including Federation II, Island of Kesmai, MUD II, and Stellar Emperor.

DR. ALAN BARATZ APPOINTED CEO OF DELPHI

Mr. Rupert Murdoch, Chairman and Chief Executive of News Corporation, recently announced the appointment of Dr. Alan Baratz, 39, to the position of Chief Executive Officer of Delphi Internet Services, effective August 1, 1994. Dr. Baratz succeeds Mr. Daniel Bruns who has been named Chairman of Delphi Internet Services.

Dr. Baratz has been a senior executive with International Business Machines Corporation in Armonk, New York. Most recently he held the position of IBM Director of Strategic Development with responsibilities for IBM network services. Dr. Baratz was previously Group Director of High Performance Computing and Communications in IBM's Multimedia Divi-

sion. In that capacity, he played a significant role in the establishment of the Internet as he led IBM's efforts in the creation of the National Science Foundation Network (NSFNET), the nationwide backbone of the Internet.

Dr. Baratz holds his doctorate in Computer Science and an MS in Electrical Engineering and Computer Science, both from the Massachusetts Institute of

Technology. His BS degree in Mathematics/ Computer Science is from UCLA. His areas of technical expertise include network design and network-based applications software development.

FINDING PEOPLE ON THE NETS

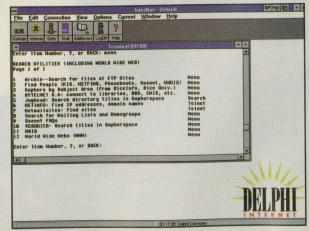
Did you ever want to track down an old friend's email address. Delphi's Internet services provide a set of search tools that make it possible to find people all over the world. The more you know about a person, the more likely you are to be able to find an e-mail address, but

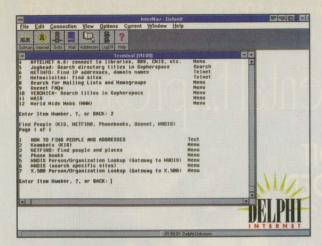


even if you have no idea where a person is located, you have a fair chance if he or she is active on the Internet. Here are some approaches that begin with the situation where you know everything but the user ID or e-mail address and range to the situation where you know nothing but the person's name.

TELEPHONE. The most obvious way doesn't use the Internet at all. Use information and call the person on the telephone, and ask for the e-mail address. Surprisingly often, the person isn't sure. In such cases, ask the person to send you e-mail at your address (yourid@delphi.com). This will usually tell you the address.

FINGER. If you know the person's name and e-mail address, but not the username, try the finger command from the Internet SIG's Utilities menu. Not every place supports finger, but where it is supported, it will give you quick confirmation. When you type a command in this form, it will





tell you the person's userid, the last time logged on, and perhaps even some other personal information, if it has been posted in a file called a plan finger lastname@email.address

GOPHER SUPPORTED UTILITIES.

If you enter Delphi's main gopher and select **SEARCH UTILITIES**: see menu in graphic.

The third item on this menu is Finding People. When you select it, you see the set of search tools and help that appear in the next figure.

NETFIND AND PHONEBOOKS. If

finger is not successful, there are more powerful utilities in the Internet SIG gopher's SEARCH UTILITIES menu. If you know the person's organization, but not the specific e-mail address, Netfind and Phone Books give you two more approaches. First, check the Phone Books menu to see if the person's organization has online phone books. While there are no master phone books of the whole Internet, many organizations maintain a phone book that you can search. Follow the menus to the appropriate organization. A master list of Internet phone books is maintained at Notre Dame, and you can tap into this source by gopher. You can track down the appropriate phone book geographically and alphabetically.

Netfind lets you look up a person when you just know part of the address or organization. It is a kind of super finger command that will work with less information. Select one of the Netfind choices, login as netfind and select item 2 on the menu that comes up:

Top level choices:

- 1. Help
- 2. Search

- 3. Seed database lookup
- 4. Options
- 5. Quit (exit server)

When prompted, enter a name followed by a set of keywords that describe the address, such as howe world std com

The name can be a first, last, or username, but only one name can be used. The keys should list where the person works by the name of the institution or location. If you

know the institution's domain name (e.g., "world.std.com", you can specify it as keys without the dots (e.g., "world std com"). Keys are case insensitive and may be specified in any order. Specifying too many keys may cause searches to fail. If this happens, try specifying fewer keys, e.g., howe std

If you specify keys that match many domains, Netfind will list the matching domains/organizations and ask you to form a more specific search. Note that you can use any of the

words in the organization strings (in addition to the domain components) as keys in future searches. When prompted to select domains to search, you should specify them in order of what you think is their likelihood of success.

WHOIS. The WHOIS utility lets you search many different

organizations by a slightly different approach. The Delphi gopher gives you the general WHOIS maintained by the government, primarily for system administrators and government personnel, and the second one where you can follow menus to many different organizations.

X.500 Another type of phone book used by many organizations allows you to look up people systematically. The lookups are quite straightforward, if

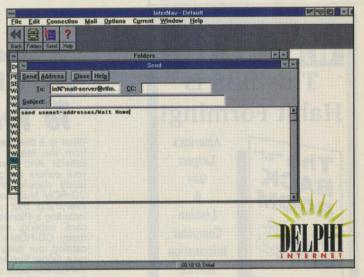
you find the organization you are looking for in the menus.

FINDING AN ADDRESS FOR A PERSON WHERE YOU DO NOT KNOW THE ORGANIZATION OR LOCATION. This is akin to looking for a long lost friend, and the chances are not very good, but occasionally, the search yields pleasant surprises.

KIS. You can give it your best shot by trying the Knowbot Information System (KIS), which can search the national WHOIS services at Internic, MCIMail accounts, and certain European networks. Select Knowbots from the gopher menu, and follow instructions to log in. You can start a search just by typing in lastname firstname and pressing enter, or you can type help the first time to learn about more options in the service.

USENET NEWSGROUP USERS

Another way that can be surprisingly successful is to search the database of all people who post to Usenet newsgroups. This will find someone in any part of the world, whether or not they are in any phone book or users list. All



that is required is that they posted a message to a newsgroup at some time in the not too distant past. The database to be searched is the usenet-addresses.src file maintained by MIT. This utility used to be available for searching by WAIS, the Wide Area Information Service developed by Thinking Machines Corporation originally. It is not currently available from public WAIS sources, but it can be searched by sending e-mail to MIT. The third figure shows a WAIS search set up in the Internay software mail

Pro Footbal

"Run this Unique program on your BBS' (Door Required / will also run on a Non-BBS IBM)

Your Callers will have 11 Years of Data at their finger tips!

Virtually ANY question can be Asked & Answered

Run your own "Office Pool" On-Line "BBS Pro Football Pool"

You can be the HOTTEST BBS in Town!! Give your callers a Reason to call, Week after Week :-)

Call NOW - Today!

(Suggested Retail Price \$235.00)

First 500 Non bbs orders ONLY \$85.00*

Sysop Special: ONLY \$50.00*

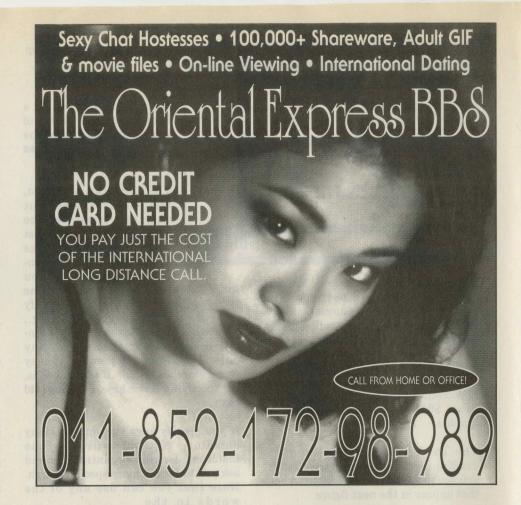
(National bbs promotion / Limited # of BBS Copies)

Like We Say... WINNERS Call - Losers Stall :-)

Phone Orders: 716-688-2667 OLS · 170 STUEWERD · GETZVILLE, NY 14068

(*FREE updates all season long via modem)





This BBS is **Habit Forming!**



America's Largest Gay Lesbian Computer Information Service and Resource

Community News and AIDS Information. .GIF and File Sections - Profiles -Multiuser Games - Hot Chat -Commercial Services -**USA Today Online and MORE!**

Call with Your Computer... TODAY!

(718) 951-8256!

300/1200/2400/9600/14.4k baud 8,N,1 You Must be 18 or Older

Add Up To Six Gigabytes

What is it that separates the Big Boy BBS's from the rest? It's what they offer their callers! And there is no easier way to offer your callers six gigabytes of the best BBS ready material than to get the Arsenal's CD-ROM Multichanger package! It includes everything that you need to get started, everything that you need to get started, including a Pioneer DRM-602x Drive, a SCSI card, cabling, software drivers, nine BBS ready CD-ROM's of your choice from our catalog, our easy instruction manual written by a fellow SysOp, and a registered copy of the EZRom Door controller program. Call us for a complete catalog and info sheet!

It's Fast, Easy to Do, and Guaranteed for 60 Days!



P. O. Box 5723, Topeka, KS 66605 913-234-4146 Tech Support 913-234-8528 FAX Line 913-234-9395 10 Line BBS

Special Offer! An Adult CD-ROM for only \$10.00 Delivered!

And get up to \$70.00 off your next order!

Try out this special Disc from Ero Tek, previewing all of their adult CD-ROM's, and get a certificate good for up to \$70.00 off your purchase of any of those titles! There are hundreds of quality images covering five adult CD-ROM titles on this disc. You can't go wrong with Ero Tek!

BBS CD-ROM's

We carry what we use on our own BBS. When we say that it's BBS ready, you can bet that it will be. If you don't like it when you get it, you can use our 60-day, no questions asked guarantee to exchange it or get a refund of your money. We carry all the major BBS titles, and we go out of our way to find quality gems to offer you such as The Arsenal Files, Tech Arsenal, By Popular Request, Gamers Arsenal, Business Arsenal, Private Line Adult, Digital Dreams 1/2/3, or Targa Party. Call us today for a free catalog!

All Products Guaranteed for up to 60 Days!

Toll Free Hotline - I-800-9CD-SALE

editor. The address window does not show the full address, which is mail-server@rtfm.mit.edu.

MUDS, MUSHES, MUSES, MUCKS, AND MOOS

The above names are various types of multi-user role playing games. The basic type is the MUD, which is an acronym for Multi-User Dungeon (or Domain or Dimension). Delphi's gophers now point to approximately 350 of these popular games around the world. Approximately two-thirds of these are the classic hack and slash games based in fantasy or science fiction worlds where the object is to grow stronger competitively by killing monsters and sometimes each other. The other third are the more social games, where the object is to interact with others and build a world rather than kill its monsters. Whichever type you prefer, they can be very addictive. Delphi member RICKADAMS has been running a Saturday evening seminar on MUDs to introduce new users to the games. Drop in at 10 Eastern time in the Internet SIG conference area on

almost any Saturday night. Read his tutorial in the Resources Database, too.

CUSTOM FORUM 300 REACHED

Delphi's popular Custom Forums, where any user can set up his or her own forum, have now gone over the 300 mark. Six months ago, there were barely 100 Custom Forums. Last month's issue mentioned that the Shareware program Rainbow, which was ported over from NVN by its author David Colston was available in CF200, the NVN Custom Forum. "Uncle Dave" now has his own CF supporting Rainbow. You can pick up the latest version and get timely support for your questions in Custom Forum 250.

[Walt Howe is the Internet Special Interest Group Manager on Delphi. He comes from a long background in the online world, and he has sysoped during the past 12 years for several BBSs, the old Source network, CompuServe, and Delphi. He worked for the Army for 32 years training soldiers in Signals Intelligence skills

until he retired two years ago. He was a cryptanalyst while in uniform in the early 60s. Surfing the nets comes very naturally after this kind of background. He is the co-author with Steve Lambert of the current book Internet Basics. Your Online Access to the Global Electronic Superhighway, available in most bookstores. A previous publication was for the Army, FM 34-40-2 Basic Cryptanalysis (not available to the public). Walt has also written a number of user manuals for various computer companies, including Delphi. Walt can be reached by e-mail as walthowe@delphi .com. A five hour free Delphi membership is available by dialing 800-695-4002 by modem and using the password INTERNETSIG.

The goal is simple: To increase the access and profitability of your BBS, and do it in an easy, economical way.

The answer is simple: Work with a network carrier who has the technology and resources already in place to make it happen right now . . . at the lowest price.

Utilizing its X.25 packet-switched network, the ADP/Autonet Division can help a sysop become a nationwide, or even international, business practically overnight. Autonet provides the PDN (or VAN) needed to transmit data for the BBS. It literally puts ADP's network to work for the sysop.

The X.25 protocol, in addition to being economical, also offers superior error-checking capabilities and ensures error-free transmission.

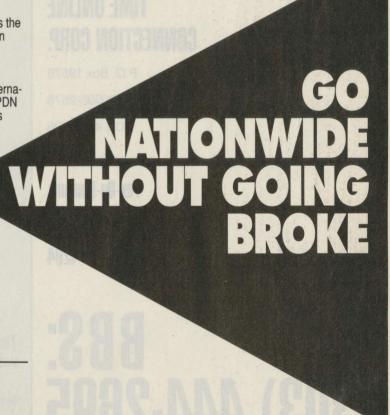
If you want to expand your BBS at the lowest possible cost, call today. We'll rush you a free information packet that will show you how a sysop can grow fast with ADP/Autonet.

1.800.827.8254



Autonet Division

175 Jackson Plaza, Ann Arbor, Michigan 48106 Phone: 313.995.6501, Fax: 313.995.6458 © Copyright 1993, Automatic Data Processing



LONG DISTANCE TAILORED FOR THE ONLINE COMMUNITY

TIME ONLINE CONNECTION CORP.

P.O. Box 19576

Boulder, CO 80308-2576

(303) 473-9796

Fax-On-Demand: (303) 727-4314 Fax: (303) 727-4294

(303) 444-2695

TIME ONLINE CONNECTION (TOC) provides long distance and other telecommunication services to the online community. TOC was designed for, and by, BBS enthusiasts.

TOC Customers Enjoy:

- ☐ Very low rates for interstate long distance services
- Online registration and customer service
- Customized billing reports
- ☐ Account codes (if desired)
- ☐ Six second billing on most service plans
- Security of using America's largest and most advanced digital, fiber-optic network
- Credit card payment

BBS Enthusiasts, Sysops, Residential and Commercial customers can utilize either or both of the "Basic Services" plans: By registering for both plans, you guarantee the best long distance rates!

PLAN 1:

"After-Hours" This plan is specifically designed for the majority of BBS enthusiasts. It offers a low weekend and after-work rate, but a higher midday rate (*).

10.9 cents/minute! Saturday, Sunday to 5pm and after 11pm, Weekdays 11pm - 8am, and Holidays

12.9 cents/minute! Weekdays 5pm - 11pm, Sunday 5pm - 11pm

24.9 cents/minute Weekdays 8am - 5pm

PLAN 2:

"All-Day Any-Day" This plan offers the convenience of a low flat rate 365 days a year, 24 hours a day(*). This plan is specifically designed for the BBS enthusiast or business that makes a majority of mid-day calls.

13.9 cents/minute! All-Day Any-Day!

13.5 cents/minute! With 24-month agreement.

Take advantage of TOC rates and benefits without changing from your current carrier.

Sysops: You may qualify for one of our "Sysop Business Partner Plans."
Call for details! Time Online Connection also offers T1,
800 number, International, and Calling Card services.

(*) Interstate rates.

BOARDWATCH MAGAZINE

BBS SOFTWARE VENDORS

October 1994

product	Company	"Toice	Eat	BB5	Platform	Tele Lines	Mult	Taske	Logons	Interi	net out	Hiner Ch	at Price:N	Price Min
CNet Pro 3 CocoNet	Perspective Software Coconut Computing, Inc	313-537-6168 619-456-2002	313-537-5942	313-255-2466 619-456-0815	Amiga UNIX	Unlim 100 1000 -	OS OS	Y	I	12	I J N N	Y	\$229.95 \$18.995	\$229.95 \$395
DLG Professional	Telepro Technologies	403-341-7826	403-341-7826	403-347-3262	AMIGA	Unlim 29	OS	N	200	3	3 N	Y	\$299	\$299
Excalibur BBS	Excalibur Communications, Inc	918-496-7881	918-491-0033	918-496-8113	Windows	Unlim 8	OS	Y		3	3 N	Y	\$349	\$199
EXCELSIOR! Pro	Sycom Design Software	313-774-2153	313-772-5802	313-772-6442	Amiga	Unlim Unlim		N	_	3	IN	Y	\$199	\$199
Faulken	INFO*Share, Inc	703-791-2910	703-791-2910	703-749-2889	DOS	? 64	1	N		0	1 1	Y	\$999	\$149
FirstClass	SoftArc, Inc	416-299-4723	416-754-1856	416-609-2250	MAC	100 22	OS	Y		0	N I	Y	\$3450	\$95
GAP	GAP Development Co	714-496-3774	714-496-3774	714-493-3819	DOS	100 16	DV	Y		3	IY	Y	\$359	\$79
Hermes II	Computer Classifieds	206-643-2316	206-643-7830	206-643-2874	MAC	10 10	OS	Y	3	3	NN	Y	\$95	\$95
hi-BBS	XBR Communication	514-489-1001	514-489-4966	514-489-0445	MAC	130 ?	OS	Y	N	0	NN	Y	\$3400	\$70
Kitten	TelPro Technologies	804-442-5865	- 3 6 6 6	804-442-5867	DOS/OS2	999 ?	OS	Y	3	3	NN	Y	\$195	\$195
Magnum BBS	Gilmore Systems	805-379-3210	805-379-1341	805-379-3450	OS/2	Unlim 32	OS	Y	N	N	IN	Y	\$900	\$75
MEGAHOST	ASCII Computer Enterprises	-	· B = 3 E :	209-836-2402	DOS	10 8	DV	Y	3	3	3 N	Y	\$49	\$49
Multi-Net	Multi-Net Communications	503-883-8099	503-883-7879	503-883-8197	OS2	999 12	OS	Y	N	N	IN	Y	\$895	\$195
Novalink Professional	ResNova Software Inc	714-379-9000	714-379-9014	714-379-9004	MAC	Unlim 40	OS	Y	3	1	NN	Y	?	\$300
OPUS-CBCS	E R & S S S S A 8 4 8 9	214-528-4687	BEOM	214-528-4943	DOS	255 1	DV	N		3	3 N	Y	Free	Free
PCBoard	Clark Development, Inc	801-261-1686	801-261-8987	801-261-8976	DOS	1000+ 16	DV	Y		3	1 3	Y	\$10000	\$170
PowerBBS	Power Computing	516-938-0506	# P. T. S. E. P.	516-822-7396	Windows	Unlim 9	OS	N	3		IN	Y	\$189	\$99
Powerboard BBS	NUIQ Software, Inc	914-833-3479	914-833-3623	914-833-1479	DOS	999 8	DV	Y		3	IY	Y	\$2300	\$99
ProBoard	ProBoard International	612-537-8655	612-537-8613	612-537-8659	DOS	255 8	DV	Y	50.	N	IN	Y	\$49	\$49
ProLine	Morgan Davis group	619-670-0563	619-670-9643	619-670-5379	APPLEII	1 1	-9	Y	N		NN	N	\$159.95	\$159.95
RATsoft ST RemoteAccess	ROdent Laboratories Software	040 444 4000	010 111 0500	801-756-2901	ATARI	? ?	-	1/	0		0 11		AF00	0440
RoboBoard/FX	Wantree Hamilton TeleGraphics	913-441-1336 800-363-7626	913-441-0596 819-685-0994	913-441-0595	DOS	250 1	DV	Y	3	-	3 N	Y	\$529	\$149
RyBBS		414-962-5967	819-685-0994	819-682-7771	DOS	255 8	DV	Y		0	NN		\$400	\$95
Sapphire	The Ryco Company Pinnacle Software	514-345-9578	514-733-8644	414-962-1097 514-345-8654	DOS	9 4	DV			N N	3 N N N	Y	\$175	\$75
Searchlight BBS	Searchlight Software	216-631-9290	216-631-9289	216-631-9285	DOS	Unlim 10	DV	N		3	N N 3 3	Y	\$45 \$399	\$45 \$99
Second Sight Software	FreeSoft Co.	412-846-2700	210-031-9209	412-846-5312	MAC	2 2	OS	Y		N	NN	N	\$399	\$199
SpitFire BBS	Buffalo Creek Software	515-225-9552	2 2 2 2 2	515-225-8496	DOS	255 1	DV	Y		3	IN	Y	\$85	\$85
Synchronet	Digital Dynamics	714-529-6328	714-529-9721	714-529-5313	DOS	250 10	DV	Y		3	IN	Y	\$399	\$99
TBBS	eSoft. Inc	303-699-6565	303-699-6872	303-699-8222	DOS	- 64	1	N		3	ON	Y	\$1995	\$295
TEAMate	MMB Development Corp.	310-318-1322	310-318-2162	310-318-5302	UNIX	Unlim -	OS	Y		0	ON	Y	\$125000	\$2000
Telefinder	Spider Island Software	714-669-9260	714-669-1383	714-730-5785	MAC	200 20	OS	Y		3	NN	Y	\$2000	\$425
The Major BBS	Galacticomm, Inc.	305-583-5990	305-583-7846	305-583-7808	DOS	256 256	1	Y	-	0	YY	Y	\$10717	\$259
TinyHost	Bruce Krobusek	716-924-8284	716-924-4193	716-924-4193	DOS	1 1	DV	N	N	N	NN	Y	\$25	\$25
TriBBS	TriSoft		207-941-9388	207-941-0805	DOS	255 4	DV	Y	0	3	ON	Y	\$75	\$75
UltraBBS	CDB Systems, Inc	303-444-7071	303-444-0035	303-642-7463	DOS	Unlim 4	DV	Y	1	1	IY	Y	\$75	\$75
Virtual BBS	Virtual Technologies	210-787-2443	616-399-8934	616-399-4818	DOS/OS2	1024 16	DV	Y		3	1 1	Y	\$999	\$99
Wildcat!	Mustang Software, Inc.	805-873-2500	805-873-2599	805-873-2400	DOS	250 8	DV	Y		0	1 0	Y	\$799	\$129
WWIV	WWIV Software Services	210-631-6090		210-631-5841	DOS	999 8	DV	Y	-	3	3 N	Y	\$320	\$80
Z/Max XChange	Z/Max Computer Solutions, Inc	315-635-1882	315-635-1908	-	UNIX	Unlim -	OS	Y	N		NN	Y	?	\$695
	bulk bulk bulk bulk bulk bulk bulk bulk		The state of the s		2 6									

Y = YES

N = NO

I = INTERNAL

O = OPTIONAL

3 = THIRD PARTY

AMERICA ONLINE

AOL IS NAMED BEST BY DVORAK AWARDS AND IS SPORTING A NEW LOOK



By Dave Tennant

A OL has been named best online service of the year, receiving the Dvorak Telecommunications Award, and Steve Case has won top honors as its President at ONE BBSCON, the Electronic BBS super convention held in August in Atlanta, Georgia. The award, presented by John Dvorak, and sponsored by Hayes Microcomputer Products Company, lauded AOL for its explosive growth, response to consumer demand, and easy to use interface.

And even better news is that pretty soon AOL will have software. By the time you read this column, users of the Macintosh version will be using their free AOL update, and users of the Windows version will be receiving their free software in the mail. I wasn't able to beta test the Macintosh AOL software, but one of my moles who is a beta tester let me look over their shoulder at the new beta version of WAOL 2.0, which takes up 2 megabytes of hard disk space (Wow!).

The new interface fits a lot more on opening screen real estate. Some of the Highlights include newer, more upto-date graphics (kind of a quasi multimedia style), flatter and wider buttons for easier access that will take you in a moment from the main menu to major areas of the services AOL offers.

There are 14 new buttons:

- · Today's News
- Newsstand
- · Personal Finance
- Entertainment
- · Clubs & Interests
- Education
- · Computing
- Reference Desk
- · Travel
- Marketplace
- Internet Connection
- Sports
- · People Connection
- · Kids Only

There was the time that you had to know the forum, the keyword, or both, just in case you didn't like the daily button flavor selection. This is a much smarter setup making it easier for the user to explore the service and the experienced user to go quickly to their usual areas. I like to go every once in a while to the Atlantic Monthly and the New Republic to read their articles, but can forget what great coverage for news and information I get from the San Jose Mercury News - more news even than the New York Times online, which doesn't post as much as the Mercury News online. If I press the Newsstand button I'll see these as part of the selections, as well as my choice. Likewise anyone else who goes on the service for the first time will more likely than not find many ways to find something of interest.

The opening screen of WAOL has the same three boxes, and carrying on the theme of connectivity, the Blue sky in box one carries over to the other two boxes with a golden key appearing when you sign on, moving to lightning, and then illuminating a dark blue AOL symbol. this new opening symbol gives the look of more up to date graphics, and indeed it is, but it is not multimedia. AOL President Steve Case stated in an earlier letter to members that the service would make more evolutionary (rather than revolutionary) changes toward a MUI interface - one with more multimedia - and this new Windows version of the software moves a little in that direction, but only a little. True MUI won't be available till AOL comes to our homes via fiber optic or cable. In the meantime, the new graphics are visually interesting with different pictures and a deeper 3-D set of images for the various forums on the main menu and the "What's currently hot" menu, but the new look only lasts for the first one or two screen levels, and then the service takes on the same old look. Except for a couple of weather screen shots, there is still no capacity to view pictures on the screen (as one can on Prodigy). This software is probably the foundation for future screens, and AOL is most likely building the screens one at a time to later upload to the user.

While exploring around AOL I came across the current construction of the new WordPerfect Magazine Online. While browsing the literature, I discovered what might be one of the more promising aspects of developments on AOL; Online Access Electronic Magazine Binder (OLA for short). OLA is a viewer, using the Envoy format, that makes it possible for publishers to post an electronic version of a magazine article that looks like the paper version (graphics, formatting, screen shots, etc.) It is a unified place to store and retrieve all article files uploaded in OLA format. Word Perfect Magazine Online will be one of the first magazines offering online access with OLA. Articles will be posted in a text-only version which can be viewed online, as usual, and an electronic magazine version which can also be read with the online Access Electronic Magazine Binder. The OLA Binder will allow users to see all the graphics, screen shots, and design that make up Word-Perfect Magazine's award-winning publication.

I'm hoping that this format will become a standard and that in the future, some form of hypermedia will be available in these articles as well. For right now, the macros and associated files from each article will also be available in the WordPerfect Magazine forum.

COMPUTER CURRENTS ON AOL

Speaking of magazines on AOL, I recently found one of my favorite magazines online. Computer Currents, a monthly trade rag from the Bay area consistently carries the latest news about the ever-changing computing world and I found it carried under the San Jose Mercury News. It's a little buried and you have to dig for it, but keyword "Mercury," click the business and then computing button, and you'll see the Computer Currents file on the

bottom of the dialogue list. It would sure be easier if they would put the Currents button on the opening SJMN screen - or if they would give it its own keyword, say... "Computer Currents?" It's not taken; I checked. I enjoy the magazine well enough not only because of the articles, but because of the BBS listings and screen shots as well. I hope that in the future a version of AOL will support the screen shots, maybe using OLA. A listing of the BBSs, of articles, reviews, and so forth are also available. Oh, by the way, if you didn't know about Computer Currents, you may not know about your favorite BBS magazine Boardwatch. It does have its own keywod -Boardwatch.

"WOODSTUCK!"

By the time you read this article, all the fuss will most likely be over and the forum itself may be gone. But if you are a thirty or forty something waxing nostalgic for the "Purple Haze" days, or if you are in the Pearl Jam set and just curious about all the fuss over Woodstock - that first "Jurassic Park" of rock and roll, then keyword "Woodstock" and journey back to the musings of a bygone era of free love and great rock bands unsullied by the commercialism of MTV. Personally, I agree with one wag who said that the only thing naked this time was greed; Still, it is an interesting 20-20 back down one of history's more spontaneous happenings. There are some pretty cool files to download from this forum. Check out the sound wave files in the library ("Pink Thing" sound file Win Wav), or any of the Mac files. I even saw a complete song available for download from the weekend. You can see pictures of the bands, the staging, Max Yasgur's farm yesterday and today. Woodstock Online may also have the same impact as the original putting bands on the map, or in this case on the Net. Attention Deadheads (Any of you out there online?); the Grateful Dead have their own forum complete with photographs to download, and the latest news on this summer's music festivals. Keyword: DEAD and you are there - wherever there is.

O.J. SIMPSON ON AOL ...

Like anyone who has been alive these last few months, I have heard more than I thought I cared to regarding the O.J. Simpson case. I was intrigued though to find that AOL posted the three copies of the Grand Jury hear-

THE BUSINESS BBS

Custom Online Application Solutions

The Business BBS is a premiere online system service bureau specializing in applications for business, government, and associations.

Realize all the benefits of an expert online service, customized to meet your specific business needs and incorporating leading edge technology, without actually building or operating one. We build, operate and maintain them on our equipment, from our facility. The Business BBS alternative saves you time, money, and resources: It ensures a professionally designed and operated online service which is easy to use.



We'll custom design your applications - integrating state-of-the-art graphics, fax, user interface, and database technology. The Graphical User Interface and image capabilities integrate the latest RIPscrip technology. We offer 5 different database engines and the ability to display objects and images with database records.

Our tool kit includes the *only* multi-user fully *programmable*, online client/server relational database. Many off-line database programs can be run online, often with little or no reprogramming.

Combine our online expertise with your business and customer knowledge for cost efficient, easy to use, integrated applications.

Online demonstrations are available by appointment. Telephone today for more information.

Voice (310) 477-0593 Fax (310) 477-9475

THE BUSINESS BBS

2531 Sawtelle Blvd., Suite 109 Los Angeles, CA 90064-3163

*Photographic images available April 1994

ings online in the Court TV forum (Keyword: Court TV). In the text files, which can be imported to any word-processor, you can read one witness' attempt to keep himself from charges, only to be forced to testify; or, read the chilling details from the coroner's testimony regarding the actual wounds and cause of death. Believe me-Detective Magazine has nothing on this; it's gruesome reading!

This is the testimony heard by the Los Angeles Grand Jury before the current trial got under way, so it has very little of the courtroom theatrics that play across our TV screens on a daily basis. I can see why people are hooked on this stuff; one of my favorite shows is NBC's "Law and Order," but these Simpson Grand Jury transcripts are even more compelling and worth looking into, if only to see how slowly and painstakingly grind those wheels of justice.

SCIENTIFIC AMERICAN GETS INTO THE SIMPSON ACT

The new Science American Forum (Keyword: SCIAM) is a fun place to download the latest pictures of comets, planets, space ships, KlingonsOOPS, wrong forum. This forum was also jumping on the OJ Simpson bandwagon when last I visited. The headline button under the scroll bar dialogue choices blared "DNA 'FINGERPRINTING' MAY BE PIVOTAL IN O.J. SIMPSON TRIAL." This forum has the usual access to the magazine Scientific American, plus it offers discussion and message boards, Internet button shortcuts via the Internet Gateway, book reviews, articles, and a picture of the history of this, the longest continuouslypublished magazine in America. From the "Analytical Economist" to "Science and the Citizen," SA's writers and contributors form a network of scientific information that kept me exploring a long time. Here is also the place to take advantage of downloading off-line viewers for the numerous JPEGS and other pictures available in this forum. (These viewers are available all over the service). I have downloaded about six of these viewers, the latest being MPEG for Windows by Xing Technology. MPEG for Windows is a multimedia viewer for animated clips. Download the compressed file Mpegdemo.zip and WAOL will expand the program's files into a new subdirectory. Using File Manager or the File/Run command for Setup.exe, the program will configure to your system.

You can use either of the two command line methods, plus additional parameters, to customize the installation and view downloaded animated clips. Make sure to read the README.doc.

DC COMICS ONLINE

One of the newest forums, and I would bet, soon to be very popular once the word gets out, is DC Comics. (They really shouldn't call them "comic" strips anymore because they deal with pretty weighty stuff.) Keyword DC Comics and AOL will flash you a message that artwork is being loaded into your computer AOL database. The artwork on the screen shows the Man of Steel and my favorite superhero, Alfred E. Neuman; What, Me Worry? Greg Ross and the people behind DC Comics make the promise that there is much in store for America Online members. Wouldn't interactive comics and story lines be cool? Better yet: CoolWorld! I am hoping that this means they are not just going to shoot for the adolescent market, but also aim for the twenty, thirty, and forty somethings out there who comprise a growing market for what is being termed "Graphic novels."

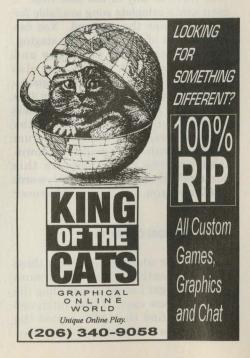
According to an August edition of US News and World Report, TDC Comics, not on AOL - yet, is cashing in on the rising popularity of its comic action figures, and I am not talking just about X-Men. Adult comic books are becoming more the rage; people who grew up reading comics have graduated from Superman and Batman, and now can read "Peepshow," explore the Arab-Israeli conflict in comic book form in artist Joe Sacco's "Palestine" or review what it is like to be a part of modern womanhood in Roberta Gregory's "Naughty Bits." Although the DC comics are still for kids, consider that you can now read the serious works like "Maus," recounting one man's father and his experiences during the nightmare years of the Holocaust, or Markowitz and Crumb's "Kafka." Be advised that these graphic novels are growing in popularity, and it would be on my wish list to see them included on AOL, either in DC comics area, or in a new one. What DC does offer in the way of new styles of comics, are the Milestone comics with its own selection of super heroes, Vertigo, and Paradox Press. Just under two years old, Milestone's characters are politically correct, offering multicultural superheroes.

One feature I am partial to is the "Dailies" which shows you how a character was released fifty years previous. In this case it was Batman in 1944. (I've followed Batman since before and through the last three Robins.) In its basic design, DC has customized "neighborhoods" offering activities for each of the editorial groups that fall within DC's realm of publishing: DC Comics, MAD Magazine, Vertigo, Milestone Media and Paradox Press. They have sections on trading cards, video games, the Six Flags theme parks, and Warner Brothers Studio Stores.

I tried to get into the Milestone, Vertigo, and Paradox Press areas several times. Each time I got an onscreen message that stated I would be getting files downloaded to my computer, a one-time only transfer that would take only a few minutes. Each time, (I tried over five times) the screen would freeze for over fifteen minutes. I suspect it was the beta WAOL 2.0 software, because going in with an old DOS version was no trouble at all, but also no graphics. I went into the auditorium (the Odean) but it wasn't open, and the rest of the forum is still under construction. I expect though that this is the place to go to meet the creators of your favorite comic strip writers.

Until next time.

[Dave Tennant is an Economics and English Instructor in Southern California. He can be reached on America Online at "Dtennan" or on the Internet at dtennan@eis.calstate.edu]



DarkStar 1.02a

DarkStar was the first DOS-based telecommunications platform to offer photo-realistic images, online digital audio, and online movies. We're the shakers and the movers, the undisputed pioneers who are shaping tomorrow's CyberSpace frontier.

When we sat down to begin work on our new 1.02a release, our objective was simple: Create a product which is undeniably the most advanced BBS software on the market at any price.

We did. And it shows.

Now, we're taking our technology mainstream.

DarkStar offers unprecedented flexibility in system design and sysop control. Consider, for a moment, the following partial list of features:



100% configurable in SysOp system design, courtesy our unparallelled array of 4GL/CASE design tools.



Full ASCII/ANSI/AVATAR undercarriage for non-graphic callers. Additionally, terminal-side shell module allows ANSI terminals to provide DarkStar graphic emulation.



Standard Windows-format .ICO icon utilization throughout (icon imports and iconbuttons)



SysOp-defined 256-color OnLine still photos in .PCX, .BMP, and .GIF formats.



SysOp-defined OnLine audio in .MOD, .SAM, .WAV, .VOC, .MID, .CMF, and .ROL formats.



SysOp-defined OnLine 256-color movies in .FLI format, with fade, cut, and speed control.



MessageBase supports Hudson, JAM, MSG and SQUISH formats. MultiNode page/chat facility supports up to 9,999 nodes.



SysOp-definedOnLine DataBases are DBase II, III, III+, IV and FoxPro-compatible. Photofield and audiofield options are provided.



One-touch file transfers, simple for even the absolute novice to use. CD-ROM support is integrated and totally seamless.



Support for Standard DORINFOx.DEF ANSI doors... as well as InterWare, our own arcade-quality multimedia doorware platform.



Fully Novell-compatible. Internal record-level locking mechanism ensures trouble-free operation to 9,999 nodes.



Graphic editor, Icon editor, Mouse Pointer editor, ANSI editor, Library manager, MessageBase editor, Terminal and Configuration facility are provided for one low price. No surprise "extras" required to get OnLine!

DarkStar

Nothing else even comes CLOSE

Demonstration System Orders and Information 1 (501) 631-5976 1 (501) 631-9806

Fido @ 1:3823/10

WorldNet @ 62:9250/10

DownLoad or FileREQuest our FREE demo version!



Sample Custom DataBase under the DarkStar Graphic Editor



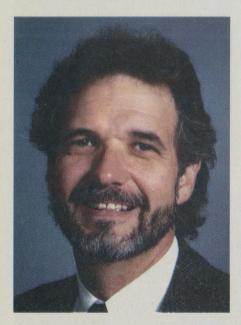
StarLink terminal dialing directory database



Sample menu under construction in the DarkStar graphic editor, with iconbutton import facility overlaid.

PRODIGY

PRODIGY GOES BACK TO SCHOOL WITH THE **FEATURES FOR TEENS** AND CHILDREN



by Ric Manning

Annie's looking for a cheerleader club. Tabitha loves band but hates marching. Adrienne says the uniform at her Catholic school is UG-LY. Tori needs help with trigonometry and Shannon is working up a protest against dissection.

Chatter in the halls at school? No, it's chatter on the School section of Prodigy's Teens Bulletin Board, where the topics range from advanced math and yearbook themes to interracial dating..

When school resumes each fall, Prodigy's usage goes up and much of the traffic is generated by students and young children. Here's a look at some of the features Prodigy offers to keep them informed and entertained:

BULLETIN BOARDS

The Teens board is loaded with notes from junior high and high schoolers, including a high percentage of girls. Many post notes looking for other kids from their school. But they also find a lot to share with members throughout the country. When one boy complained about the uniform requirements at his school and asked who had the toughest rules, he got this response from a girl named Nikki:

"T-shirts have to be folded in 8x8 inch squares, socks in 3x3, panties in 4x4, and they do pull out that ruler. If you're not perfect, you do push ups. Then fix it

and don't eat till it's all done. . . PS: I go to a military school.'

For more serious matters, there's the Homework section on Prodigy's Education Bulletin Board. Even in high summer, students were asking for help in math, psychology and history. But especially math.

"Can you come up with a way of dividing a circle into congruent pieces, at least one of which does NOT touch the center?" asked a student who was taking summer courses.

Other topics on the Education board include Classroom management, Gifted and talented, Home schooling, Special Ed and Parent Exchange, where parents talk about such things as Montessori schools, dyslexia, boarding schools and even Hooked on Phonics.

Teachers also have their own bulletin board with topics devoted to professional development, online projects, educational software, in-service training and learning adventures.

CHAT

Along with the usual gab on Prodigy's new Chat line, the service plans to offer live homework helpers this fall. Prodigy will have special rooms devoted to school subjects, such as fifth grade math, with tutors standing by to offer immediate assistance.

BABY SITTER'S CLUB

Like the TV show of the same name, the Prodigy version is designed to appeal to pre-teen girls. There is some talk about babysitting and some projects for real sitters. Kitchen Magician, for example, explains how to do tricks with cabbage and other stuff from the kitchen.



But mostly the club is a place for kids to swap ideas and tackle problems. Ask Ann is a feature that lets kids post questions to club creator Ann M. Martin. Martin posts four new answers every week. Many of the questions are lightweight, but some aren't. One girl asked Martin how to approach her real father who sends money every month but isn't interested in getting to know his daughter.

READING MAGIC

Tom Snyder's stories for young children unfold on the screen like an animated comic book. And each story includes decision points that let the child decide the direction the story will take.

For example, a recent story followed a boy who intended to mail a package for his sister. When the boy discovers there are no stamps on the package, the reader decides whether he should open the package or put it in the mailbox anyway.

KID'S NEWS

NOVA columnist Ethan Herberman explains some of nature's best mysteries in Beyond Belief, his monthly column under Kid's News.

In one recent posting, he looked at how insects are considered great eating in some cultures. You can also look up his past columns on subjects such as lightning and migrating animals.

Kid's News also offers lots of short dispatches from the celebrity world. Readers can get the latest on Michael Jackson and Lisa Marie, the stars of the next Batman film and find out if Harrison Ford will make another Indiana Jones movie.

TWISTED TALES

Children can write their own goofy stories by typing in about a dozen words. The program asks for an adverb or two, a couple of names and the odd noun, then drops them into strategic places in a funny story such as "Beauty Tips for the 90s Ghoul."

MOUNTAIN CHALLENGE

Throughout the latter months of 1993, Prodigy followed the expedition of Norman Vaughan who was a member of Admiral Richard Byrd's team that explored Antarctica in the 1920s.

Byrd named a mountain after Vaughan and Vaughan had hoped to reach the mountain by dogsled and climb it by the end of the year. The trip was postponed, however, when bad weather moved in at the end of the Antarctic summer. Vaughan vowed to try again this year.

NATIONAL GEOGRAPHIC

Every month, National Geographic introduces Prodigy members to a different part of the world. When the feature visited Arcadia National Park in Maine, members got a lesson in lobster fishing, an intimate view of a tidal pool and a chance to pose questions to a National Park ranger.

Other visits to places such as the Colorado River, Yellowstone National Park, Indonesia and the Himalaya Mountains are also online.



MAKE-IT

Make-It is a collection of fun projects kids can tackle with stuff they find around the house.

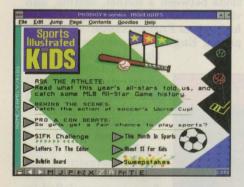
The projects are divided into gifts, party ideas, outdoor projects, games and things to do with paper.

SPORTS ILLUSTRATED FOR KIDS

This online adjunct to the magazine gives kids access to the magazine's writers and sports stars.

After the Major League All-Star Game, a 12-year-old Pittsburgh boy who got to report on the game with an SI for Kids writer posted his account on Prodigy. The kids went into the post-game interviews armed with questions contributed by Prodigy members.

A later feature offered readers tips on collecting sports memorabilia and an opportunity to question Dallas Cowboys quarterback Troy Aikman.



NORTHERN EXPOSURE

Prodigy has begun testing delivery of its service in Canada with an arrangement that makes the service available to employees of the Southam newspaper chain.

The deployment follows a test in February which Prodigy says resulted in significant demand for a Canadian version of Prodigy. Canadian computer users can subscribe to competing

services, but they pay a much higher rate than Prodigy charges.

Prodigy said it will continue expanding access to the service throughout 1994 and may decide to launch a Canadian version of Prodigy in 1995.

CELEBRITY STAMPEDE

Book authors still go on tour and movie stars still sit for Leno and Letterman. But online interviews are quickly becoming a routine stop on celebrity promotion tours.

Prodigy, for instance, lined up more than a dozen celebrities for online interviews and chats this summer and fall. Topping the list was Mick Jagger and Keith Richards from The Rolling Stones who visited Prodigy at the end of July.

Prodigy members who have Windows and a sound card heard Jagger's recorded introduction when they logged on to the interview area.

Lisa Robinson, a feature writer for Rolling Stone magazine who lines up music stars for Prodigy, said she gets more requests than she can handle. Musicians who have appeared on Prodigy in the past include Peter Gabriel, Meat Loaf and Tony Bennett.

"There's a certain cachet to being able to talk online," John Tesh told the Associated Press after the "Entertainment Tonight" host answered questions on Prodigy in June. "It's a sexy way of communicating right now."

Other celebrities Prodigy has scheduled for late summer and fall include actress Jamie Lee Curtis, basketball player Kenny Smith, baseball Hall of Famer Phil Rizzuto, authors Sidney Sheldon, Barbara Taylor Bradford and Erica Jong, comedians Steve Allen and Jerry Van Dyke, travel expert Arthur Frommer and economist John Kenneth Galbraith.

NEW BOARD TARGETS ABUSE

A new topic under Prodigy's Homelife bulletin board offers support for victims of domestic violence. The service says the board is designed to be a way for men and women to recieve support and advice in an inconspicuous forum.

Among the people contributing to the board are Michael Dowd, a lawyer who has defended women accused of killing their husbands, and Andrea Dworkin, an author who has discussed her experience as a battered spouse.

Counselors are also using the board and e-mail to distribute information on abuse shelters and laws regarding domestic abuse.

NO GUTS, NO GLORY

Quick, what city was the first capital of the Confederacy? Was it Mobile? Birmingham? Atlanta? Richmond? The answer, if you're fast enough, is worth 140 points in Guts, Prodigy's online game for trivia gunslingers.

Guts is a lot like the trivia games that NTN Communications beams to taverns and sports bars around the country. A question flashes on the screen along with a set of possible answers. You score points by choosing the right answer and more points by choosing it quickly.

You can play for fun to test you trivia knowledge or you can compete for prizes with other Guts players around the country. A round of games lasts seven weeks. Each game has seven questions and you have seven minutes to answer one. You can stop playing at any time and sit on your current score.

But here's the kicker: get one question wrong and you lose all your points for the entire seven weeks.

"That's why they call it Guts," said Tom Baer, who finished among the top three players in a recent game.

Baer, 43, works for Pitney Bowes Corp. in Connecticut. He said he's been playing Guts for about two years. After he showed the game to a few friends. they formed a loosely-organized team of five or six people who get together once a week to play.

Baer was a disk jockey who did an oldies show in college, so his expertise is in pop music. Others on his team are strong in history or science. And players should also be up on celebrity news and gossip.

One question that tripped Baer's team; which celebrity couple had the shortest marriage.

"We thought it was Richard Pryor, but the answer was Dennis Hopper ad Michelle Phillips," he said.

Baer recommends creating a team if you want to play in the big leagues.

"Don't do it alone," he said. "You'd have to be a genius.'

He also suggests having a good collection of reference books handy, such as Billboard magazine's music almanacs. And Baer's team also uses a stopwatch, so they'll know when to give up and take their best guess.

"Sometime you have to just go on instinct," he said.

Or on guts.

[Ric Manning writes about information technology for The Courier-Journal in Louisville, KY His electronic mailboxes are USJM92A on Prodigy, 72715,210 on CompuServe and ricman@iglou.com on the Internet.]

LOOKING INTO GENIE



by Lenny Bailes

As I sit here preparing this month's column on GEnie, Woodstock '94 (referred to by some of its attendees as"Greedstock") is in full swing at Saugherties, N.Y. Like its historic ancestor, this festival began its life as a commercial enterprise only to be converted into an anarchy of mud and warm bodies by ticketless invaders. The planners of Woodstock II sought to capture a vast audience in a limited access space. Once herded into the concert, attendees would be forced to pay outrageous prices for food and drink: \$6 for a burrito, \$2 for a cup of Pepsi, etc. Concertgoers who showed up on Friday were forbidden to carry their own supplies into the show. By Saturday night, fences were swept away, and most "peace patrolmen" abandoned their posts. With the aid of beer smuggled in by gatecrashers, the place was converted into a hybrid Frat

toga party/hippie smoke-in (more alcohol/less marijuana than the previous time around). One of the other differences, this time, was the simultaneous transmission of Woodstock '94 news over Internet and commercial electronic services like the Well and GEnie. GEnie's SHOWBIZ RT featured a Woodstock Survival Kittopic wherein attendees and pay per view kibbitzers posted their impressions of the celebration. A temporary Woodstock channel was also set up over the weekend on Internet Relay Chat, and the Well dispatched a special team to the concert

site to recruit new members. The IRC channel featured, among other onsite postings, a session with David Crosby, the most cybernetically advanced member of Crosby, Stills and Nash. Online reports fromWoodstock's Surreal Field indicated that mud, mud, plenty of mud and a more or less friendly chaos succeeded in replacing the pre-planned Pepsi-Cola Theme Park.

Although GEnie was outdone by The Well in its coverage of Woodstock, the SHOWBIZ RT has an unmatched collection of movie and theatrical reviews, movie discussions, and GIF

stills from a wide number of current films. If you're looking for Windows wallpaper material from your favorite flick, you can probably find it here. SHOWBIZ also features a multimedia movie review database from shareware vendor ImagiSOFT, Inc. The "Movies To Go" database includes reviews of over 1.000 films, cross-indexed by cast, director, category, year of produc-

tion and MPAA rating. The reviews, themselves, tend to be simple plot summaries. Although you won't find the kind of incisive soundbytes that make viewing selections for you, the database is really useful if, for example, you've just seen Tombstone and become a Val Kilmer fan. You can do a quick search and turn up a listing of all the films Kilmer has ever appeared in.

(If, by the way, you're a really serious Val Kilmer fan, you might want to drop in on SF author Steven Brust's topic over in the Science Fiction and Fantasy RT (Page 470). Kilmer and Doc Holliday are sacred icons in the Brust topic's official religion.)

August being GEnie's Hot Summer Nights month, an extra series of live RTC chats took place across the board. The Science Fiction and Fantasy RT featured a discussion on sf and poetry co-hosted by authors Lawrence



Schimel and Mark Kreighbaum. Schimel began by reacquainting the participants with the basic form and rhyme-scheme for a villanelle. Schimel was surprised to learn that the distinctions between a sonnet, sestina, and villanelle are no longer being taught in high school English classes. (A participating English teacher pointed out

that these days, it's considered a success just to get students to read and enjoy any poems in a classroom situation.) Mark Kreighbaum, a serious poet as well as a published science fiction author, lamented the degradation of the art form as exemplefied in current science fiction magazines. Gifted humanists like Michael Bishop or Kim Stanley Robinson may occasionally sneak real poems into their stories, but for most SF editors "poetry" equals a few lines of stereotyped doggerel to be used as page filler. The editors

A Hot <u>Summer Nights Fun</u>



have traded the paradigm of Ted Sturgeon's "Thunder and Roses" for bad limericks and Little Willie jokes. Mark K. is a working poet and maintains an excellent dynamic between "topicii" and the "topicus" in his online salon. If you're looking for a little wit and philosophy, you may want to check out

Category 11, Topic4 in SFRT1 (Page 470).

The New Age RT (Page 1122) celebrated the publication of a new Witches' Tarot deck with a round table hosted by Ellen Cannon Reed, the deck's designer. The deck is accompanied by an explanatory treatise which Cameron wrote explaining its incorporated symbolism and motifs. Eugene Tiffany, the artist of the tarot sample we ran in the last Boardwatch, wrote me an interesting letter of comment explaining how his deck was designed. Apparently he started drawing the

cards with pen and ink and

eventually decided to go high tech, employing PC design software and a DTP service bureau.

The Windows I-Ching screenshot is from a curious shareware package I discovered in the NewAge software library. The shareware authors have linked readings from the book of Chinese oracular wisdom to interpretations slanted for Yuppie business decisions. When I asked the Oracle what it thought about such a use, the Windows Decision Track version yielded the following wisdom:

Work on What Has Been Spoiled

"For happiness is only a byproduct of function,

as light is a byproduct of the electric current running through the

If the current does not run efficiently, the light does not come."

If you're wondering how the ancient Chinese sorcerers who wrote the I Ching happened to know about electricity, closer scrutiny will reveal that this is a passage from T.H. White, grafted on to the original text. The original Chinese poetry found in most common translations of the Tao D'I Ching has been supplanted by adaptations deemed more appropriate by the shareware programmers. Back when I was in college and pestering the Oracle for guidance, asking business questions would probably have netted me the

"Importunate Young Fool" hexagram. but maybe times have changed.

LIVEWIRE, GEnie's online multimedia magazine, has a special feature, this month, devoted to educational services available on GEnie. There are two divisions: the Education Round-



table (ERT) and the Computer Assisted Learning Center (CALC). The Education Roundtable (Page 405) functions as a source for teachers and course planners. It contains topical discussions of education issues: writing and critical thinking, validity of various course syllabi, etc. The ERT software library includes the text of several state education statutes, some teacher tools, and a variety of self-help tutorials for core academic subjects. The Computer Assisted Learning Center (Page 175) lets you take college-level courses online. The courses are offered in four quarters each year in eight different academic departments. Although course completion certificates don't automatically guarantee college credit, CALC has arrangements with a number of institutions to let students validate courses through qualifying examinations. These can be scheduled at local testing sites. There is a registration fee for courses taken for certification, but the homework help and tutoring sections of CALC are available to all GEnie members for the cost of the online connect time.

This month has been a busy one for GEnie's various computing roundtables. Now, even PC User Group meetings have been transformed into virtual events. The Microsoft RT played host to an Excel SIG meeting in August. The conference encapsulated the user group experience, complete with doorprizes and a presentation by Mark Dodge and Craig Stinson, the authors of "Running Excel 5 for Windows." The Microsoft RT also has resident gurus on call for most Microsoft applications, including Visual BASIC. GEnie's MIDI (Page 430) and Multimedia (Page 2000) RTs each hosted free "Hot Summer Nights" sessions. The MIDI RT holds ongoing

> weekly help sessions on Friday nights hosted by composer/sysop Steven McDonald. The Computer Game Design RT (Page 935) featured a conference on writing interactive game scripts with Christy Marx, who has authored/edited a number of popular games and TV show scripts.

> The American West RT (Page 1065) sponsored a conference in August with Jacob Eagle Eyes, founder of Native Net. Native Net is a network of approximately 100 bulletin board systems owned by, or supported by, Native Americans. These systems are dedicated to forging nonconfronta-

tional communication links between Native Americans and non-Native denizens of American cyberspace. Jacob Eagle Eyes also hosts a television show in Tampa Bay, Florida. His TV show blends traditional and contemporary Native American music with news and current affairs. The American West RT carries Wotanging Ikohe, a monthly FIDOnet newsletter, which covers issues of concern to the Native American community and also publishes some good poetry. Maybe this one has relevance for the kids who hiked 15 miles in the mud to get to Woodstock II:

I have taken the stones which the angry winds have thrown I have gathered them I have rolled them into the womb I have taken sparks from the thunder in the road I have taken water from the old woman's eyes I have crawled inside I have eaten myself I have grown strong

- Turtle Heart (turtle@aicap.s21.com)

[Lenny Bailes is a PC consultant, writer and teacher living in the San Francisco Bay Area. He is a contributing editor for Microtimes, a California computing magazine, and co-author of Byte's DOS Programmer's Cookbook.]

TELECONFUSION

BOTTOM OF THE BARREL BBSs

Art and Text by Charles J. Moore

s we all know the September Issue A of Boardwatch Magazine has been presenting the winners of the "Top 100 BBSs" for the last three years and it always turns out to be quite a contest. These are the pride of the industry and as a result, all the winners seem to be more than anxious to have their board show cased in the pages of this publication. Well, I thought the time was long overdue for us to recognize the Bulletin Board Systems that nobody ever hears about. With this thought in mind I set off on my electronic journey through Modemland and started dialing a few of these "lesser known" boards to see what is going on out there in the trenches. I must say I was overwhelmed (this expression leads me to believe that if a person can be "overwhelmed" then their normal state would be "whelmed" and extreme apathy would mean they are "underwhelmed", but I digress) by the amount of Bulletin Board Systems that go pretty much un-noticed by the online community. I do have to admit, not everyone that sets out to start a bulletin board system should bother, but for the most part I was impressed with the amount of imagination and hard work that these people put out in an effort to produce a successful system.

The following boards are just a few of these systems and by no means do they reflect the total effort put forth by all the sysops that nobody ever heard of. With names like "The Gearhead BBS," a small 2 line system in Deerbutt Indiana that boasts a special chat area for the Shadetree Mechanic; "Teds Online," this is a board that has a very specific list of callers...just guys named Ted; and I would be remiss if I did not mention "Guys with Guts BBS" - not a board meant for the brave adventurer, but is in actual fact a forum for dudes that have not seen their feet for the last 10 years. Granted, these are not the BBSs that are ever going to change the course of world history but I think they deserve an honorable mention for the hard work and focused energy that these fine folks put into their dream. My advice to these struggling sysops stay with it, someday the world will really want to call a BBS that can tell

you the real names of all the actors that ever played one of those Farengie dudes on Star Trek.



Sysop/Owner Rod Packer of the "Hey, you look like Keith Richards" BBS

This is one very tightly focused Bulletin Board System. I mean, how many people really look like the lead guitarist for the Stones? Moreover, who the hell would want to cop to it if they did? Well, as they say, there is something for everybody online. Boasting a "serious" four line system and utilizing his own "custom" (homemade) modem, Mr. Packer has set the standard for this

type of audience. "I am always being told that I could be Keith Richards twin brother," he says, with a cigarette badly in need of ashing dangling loosely from his lower lip. With this thought in mind (or vacuum) Rod set out to find other people with the same common thread. So far there are more than a dozen regular callers - and that is only in the last eighteen months. "In fact we are all going to meet for a convention this fall and it should be a lot of fun," Packer said. "Think of it, a whole room full of Keith Richards." The convention will be held at the Highway

2 Motor Hotel in Mud Flap North Dakota, just a stone's throw from the statue of the sugar beet in the town square. "I could live anywhere in the

country," he said, "but I was born a Mudflappian and this is home to me." If you are interested in file areas, this board has plenty to offer. With more than 40 megs of .GIF images of the famed guitarist doing what he does best - looking like hell but playing a half way decent guitar. This board is not for everyone but if you actually want to check it out (go figure) it can be reached by calling (777) 555-4224. By the way, make sure to call on voice line first (same number) so Mr. Packer can ready his system to receive your connection - something to

do with hanging up the phone in the garage and gettin' out the duct tape.

Sysop/Founder Tammi Tonwaddle of the Donut Dolly BBS

Situated in the basement of her "Rolling Donut Donut Shop" in the heart of downtown Cleveland, Tammi Tonwaddle went all out in the hope of meeting other Pastry Fans. With a background that includes a stint as a "Doughnut Dolly" for the local U.S.O. as well as appearing in the Broadway Musical, "Passion for the Frosted and



Filled," Ms. Tonwaddle is, without a doubt, the nation's leading authority on doughnuts and their history. Call this board and you will be greeted with a very detailed image of the "Donut of the Day." These are scanned images of actual paintings of the pastries that Tammi (who likes to call herself a part time artist) has been working on in her spare time. As these renderings will attest by their close attention to detail (right down to the smallest crumb sprinkle) this lady is not fooling around. So what could a BBS that is aimed at doughnut freaks have to offer? How about her "Really Fresh List"? This

chart is updated every 2 hours and has a complete listing of the freshest doughnuts in your particular area code. That's not all, suppose you are traveling cross country and you want to sample the best doughnuts in any given town, NO PROBLEM. "I have set up a network of every doughnut shop in the US and can provide you with a complete travel map (I like to call it my Bearclaw Triptik) of the best, as well as the worst, in the world of deep fried fantasies," she said. When asked about the healthful aspects of this chosen endeavor all you get from this impish and elliptical little lady is a subtle smile and a slight giggle followed by one of her most oft used lines, "I think all this cholesterol stuff is just a lot of hype, I exercise on a regular basis, in fact this morning I did a sit-up and jogged across the room - TWICE!" As a note, be sure to check out the "History of the Donut" area on this unique sugar-coated board. Did you know that the doughnut was actually invented out of necessity? As the story goes it seems that Hannibal had one of his cooks come up with something that could be used as a quick repair for an O-ring problem he was experiencing with one of the elephants. Contact Info: Winchell's, Mister Donut, Cop's Cafe, and your local bakery among others.

Sysop/Owner Ernie "Squish" **Brockman of the Jock Time BBS**

If you are really - I mean REALLY into the world of sports, than this is the board for you. Deep in the inner city of Boston you will find a small, but well stocked, sporting goods store tucked away in an alley right next to the big



green dumpster behind the K-Mart on Wally St. At first glance you could miss this little piece of "Testronic Heaven," with never having known it was there. But once you walk through that door you'll never forget that locker room smell and the oversized sysop/owner, Ernie "Squish" Brockman, towering behind the counter. "I was an all county defensive lineman in highschool and I just could not get the sporting thing out of my blood." After a six year tour in the army, where he was assigned to the third army supply group as a warehouse specialist in Ft. Dix N.J., it was off to school with the help of his G.I. bill.

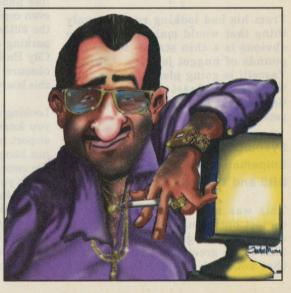
"I wanted to learn something about computers so I enrolled at the Ned Bernie School of Computer Science and Stump Blasting in Stumbly Row New York," he said. This move proved to be a turning point in his life. After graduation there was only one thing to do, "Somehow I wanted to combine my love

of sports and my vast knowledge of computers and make a darn good living at it." The rest is, as they say, history. I've paid my dues, he says, it was not an easy task to start both a sporting goods store and a quality BBS at the same time. To simplify things he concentrates only on what he terms real sports: Football, Baseball, Hockey and of course Pro Wrestling. You will never see any of those Girlie Boy Sports on my board, he continues, stuff like Soccer and Golf is OK if you are one of those New Age Sensitive Guys, but as far as I'm concerned if you ain't gonna take the risk of maybe doin'

some permanent bone or joint damage then it ain't a real sport. There are some pretty interesting areas on the board, for example, "Sports Trivia with a twist" is a favorite for many of his callers. "Let me lay one on va'," he says enthusiastically, a sweat breaking across his brow. "Who was the first professional hockey player to complete a season after having his entire frontal lobe matter removed with a bottle opener?" You are going to have to call in to find out the answer to that one. With everything from sports trivia to .GIF images of your favorite sports stars in action, this is the true "Jock Online" setup. If you are wondering about the nickname "Squish" the reply to this question was short and to the point. "When I was in High School I had this really bad problem with acne and the guys that played across the line from me came up with it." For more information call (912)555-GAME

Sysop/Owner Al "Shifty" Vascelli of the Babe Market BBS

"Hey, if you're lookin' for fleshtone files, we got em!" This is a gross understatement, to say the least. With over 450 Gigs of nothing but butt, (Bitmapped Babes) this proves to be one sleazy board. From the log on menu to the exit command it was all I could do to keep my ham sandwich from making the trip back up. With a background that includes five years as a used car salesman and a couple years pushing vacuums door to door, the logical progression to "Cybersleaze" seems to have been reached by Mr. Vascelli. "I have kept to a pretty ridged business plan since starting this board," Vascelli said. "My goal from the beginning has been to provide quality images at a reasonable price." I thought I'd take a



look at these pics for myself, strictly in the name of journalistic integrity. I was not surprised to find that they were actually low res scans of some rather poor Polaroids. I was also pretty well shocked by the fact that about eighty five percent of these images were in black and white. "I sure do catch a lot of flack from people about da black and white thing and to tell ya da truth, I guess some people just don't understand art. I mean, how bout dis Ansel Adams guy? He puts out some black and white pictures of rocks and trees and the world goes nuts for em - I just don't get it." Well Shifty, I bet you never will either.

Al got introduced to the telecommunications world when he was (as he calls it) "a fine jewelry representative for a franchise importer." In truth he was selling gold chains by the foot at the mall. As fate would have it, his booth was directly across from a Radio Shack and they had a computer set up with a modem. After closing one night while having a beer with the salesman he was shown a few .GIF files from a local BBS in his home town of Baileyville Illinois. "Well, that did it, I thought this has got to be the better mousetrap, I mean think about it, all I have to do is get me some of these pictures and sell them to these computer guys and I can make a bundle." I never did ask Mr. Vascelli where he obtained his images or models for these images but I have my doubts as to there being any connection to the word professional, at least in the model sense. "I don't care what the rest of the world does - I provide a service to my callers and it is all covered by my constitutional rights, I think it's the 53rd amendment (or one of dem amendments) that says we have the right to look at pictures of naked babes...Gimme a Break!"

From his bad looking rug (the only thing that would make it look more obvious is a chin strap) to his five pounds of nugget jewelry, "Shifty" Vascelli is going places, more than likely for at least 10 to 12 years. Contact Info: Not Available at this time, pending investigation

Sysop/Owner Edward "BUD" Snipeman of the Humboldt County BBS and Trail Mix Cafe

This was a pretty tough board to contact but I finally did get through. After several long minutes of blank air time I was greeted with a sound file that sounded like a solo mandolin



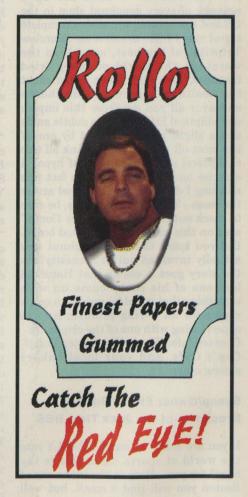
version of "Stairway to Heaven" as it turns out that is exactly what it was. Seems that the sysop, Edward "Bud" Snipeman, has a dream to some day play on-stage with Jimmy Page. He said, "I think I was a musician in one of my past lives and it feels right to play.

"I like the classics, anything by Hendrix or Pete Townsend is O.K., I still wonder what happened to Elton John though, I mean really, a duet with Kiki Dee?, musta been bad karma." This is one unusual board all the way around. Let's start with location. Based in the backwoods of Northern California's Humboldt County it is not easy to find any signs of life. I must say however, I can not recall ever seeing a more fertile BBS...Bar None! This board has more areas than I can even start to describe, How about this ... "The complete works of Hunter S. Thompson." This is not just all of Dr. Thompson's published works but things like phone scribbles, EEG strips and even copies of parking tickets issued to the author for such legal infractions as parking on the steps of the Las Vegas City Hall. This is only a fraction of the obscure files that can be accessed on this board.

Looking for a cheap way to travel? Did you know that if you show up at the airport in a pair of white coveralls and just hang out for awhile and act like you are sweeping the floor or emptying the trash you can actually go on-board a plane that is bound for your particular destination and hide in the cargo hold area. May not be first class but it is free! Found this one in the "Travel Tips" area. Boasting the "World's largest collection of Granola Recipes" and "101

ways to get high on stuff you can buy at the supermarket," it looks like Bud Snipeman has pretty well cornered the market on the sixties generation. If you are looking for a board that is loaded (no pun intended) you might give the Humboldt County BBS and Trail Mix Cafe a call or as Bud likes to say "Catch The Red Eye."

To contact the board, take a Oujii board and place any standard modem underneath it. While meditating, repeat, "There's nothing like homegrown ...there's nothing like homegrown."



DIRECT DIAL

THIS MONTH: 506 TECHNICAL/PRODUCT SUPPORT SYSTEMS

by Brian Gallagher

Bulletin Board System lists come in many sizes and varieties with as many different focuses. A large number of them encompass an area code or region particularly helpful to those within who enjoy not paying exorbitant long distance rates. Other lists are specialized towards a particular industry or avocation, (i.e. medical, government, software platform or operating system, climbing, fishing etc.). Among the limitless lists available on a panoply of subjects, there are very few with as broad an appeal to the online community as Gary Barr's Technical Support BBS list sporting 506 systems.

When Barr first started keeping the list in November 1991 there were around 40 tech support boards in existence that he could find. Since then, the interest and practicality of technical support through an online medium has caught on among the major hardware and software manufacturers leading to an explosion of the systems - all of which Barr has tenaciously tracked. Of course he does get some help with this formidable task, many companies are careful to contact him when they open up a new system or inform him of phone number or other changes on their existing systems.

In fact Barr's list is required reading and reference material for several corporation's technical support personnel. Then, if for example, a caller's difficulty is not with the device or software they were inquiring about, rather a problem with a driver - the tech can refer the caller to the right place to get the driver they need.

First enticed by computers in the sixth grade, Barr followed his fascination through to fruition, and just before graduating high school, quit his job at a computer retail store and opened up his own in 1987. Along with high school sweetheart, Danica, now wife and cosysop for the last year and a half, he has managed to build the business into a profitable enterprise selling hardware and software with brisk sales in CD ROMs.

It was his business, Computers by Design, that pushed him into keeping the list in the first place. "In my business," he said, "people needed product support for this and that, I figured it would be a pretty good idea to keep (the list) and share it with everybody." It turned out to be a really good idea. Comprised of approximately

half hardware and half software companies, the list has spread in fame largely through word of mouth with 500 to 600 downloads every month, from all over the world.

For those wanting a copy of the list, it can be found on his 14-line Digicom BBS, (812)479-1310 in Evansville Indiana - (The board is in no way connected to Digicom Systems in Milpitas California). From the main menu push "D" for Digicom Publications - the list is titled "SUPRT 409.ZIP" where the "4" is the last digit in the current year, and "09" represents the month the list was updated, which is every month. Barr has been running his Remote Access system since May 1985, making it one of the longer running systems around. It is set up on a Novell LAN with a 486/66 file server and 14 386/33s - one for each node, with accompanying V. Everything U.S. Robotics modems.

With 15 gigabytes of online files, (12 of these are from a Pioneer 18 disk CD ROM changer), Barr stresses the message bases are where the real action is on his system. When it does come to files, however, it is the adult files that tend to be downloaded most often. A Remote Access beta test site, Barr is also well stocked in files particularly targeted towards sysops - doors, test drivers and the like, to the tune of 500

His board also has a large game playing contingency and carries several "good reads" including USA Today, Genesys



Gary and Danica Barr with their Digicom BBS of Evansville, IN

Daily News and Roger Ebert's movie reviews and celebrity interviews.

For the future of the board, Barr is looking to add 300 newsgroups via a Planet Connect satellite feed. For the future of the list Barr is thinking about making a more comprehensive version with addresses, phone and fax numbers and other available contact information in a database format. While the current list is free, the all inclusive list (which he has received numerous requests for), would require quite a bit more work, and he is thinking of charging a yearly subscription fee of \$5.

There is no mandatory fee for Barr's BBS leaving the list open to all who need it, but they will be limited to one half hour per day on the system. For an annual fee of \$25 callers receive two hours per day, and \$40 annually gives callers four hours per day and full access to all the CD ROMs, (i.e. adult).

As far as lists go, you'll be hard pressed to find one that is more useful or popular than Barr's product support list; and a word to the wise - don't expect to just jump right on his system and grab it, 14 lines just isn't quite cutting it. For those who can't obtain the list for whatever reason, the Barr's will send a copy of the list to all who send a self addressed stamped envelope. Gary Barr, the Digicom BBS, and the product support list; The Digicom BBS, 4600 Vogel Road, Evansville, IN 47715; (812)474-0910 voice; (812)474-2264 fax; (812)479-1310 BBS.

TECHNICAL/PRODUCT SUPPORT SYSTEMS

List courtesy of Gary Barr, Digicomm BBS 812-479-1310

3Com	408-980-8204	Network Cards
3rd Planet Software, Inc	213-841-2260	Network Assist Plus
Abacus Concepts	616-698-8106	Statview, Supernova Mac
Abaton Technology	510-226-9694	Laser Printer, Scanner
Above Software	714-851-5102	Above Disc, Golden Retriever
Access Software	801-364-7449	Links & Other Games
Accolade	408-296-8800	Gaming Software
Accton Technology	510-226-9832	Networking Products
Ace Software	408-451-0571	Home Office Org., Post Office
Activision	310-820-1276	Activision Games
Adaptec	408-945-7727	Controllers
Addstor	415-365-2510	Superstor
Advanced Digital Corp	714-894-0893	SCSI Control, Tape Backups
Advanced Gravis Computer	604-431-5927	Entertainment Hardware
Advanced Logical Research	714-458-6834	ALR Computer Systems
All Computer	416-960-8679	Motherboards
Alloy Computer Products	508-486-4044	Storage Devices
Allied Telesis	415-964-2994	Networking
Alpha Software	617-229-2915	Alpha Database
Altima	510-356-2456	Laptops
Altsys	214-680-8592	Fontographer
Amdek Corporation	408-922-4400	Monitors
American Megatrends (AMI)	404-246-8780	AMI BIOS, Motherboards
American Small Business Co	918-825-4878	Designcad
Apogee Software	508-365-2359	Games, Keen, Secret Agent
Applied Engineering	214-241-6677	FAX/Modem, Fastmath
Arsenal Computer	913-234-9395	Arsenel & Ero Tek CDROM
Artisoft	602-884-8648	Lantastic Networking
Artist Graphics	612-631-7669	Command Center
Ask Sam Systems	904-584-8287	Ask Sam LAN
Aspen Peripherals	503-286-9620	Aspen Peripherals Modems
Asymetrix	206-451-1173	Multimedia Software
AST Research	714-727-4132	Computer Systems
AST Research Canada	905-512-8558	Computer Systems
ATI Technologies	905-756-4591	Video Cards, Modems
AT&T Computer Systems	908-769-6397	Computers
Aurora Terra	301-230-1214	Aurora Terra
Autodesk Inc	415-289-2270	Animator, Graphic Products
Automated Design Systems	404-394-7448	Windows Workstation
Avatar	404-740-8428	Networking Hardware IBM, Mac
Award	408-371-3139	BIOS
Beagle Bros	801-226-1605	Beagle Works, Timeout
Best Power Technology	608-565-7424	Power Products & Accessories
Bestgift Service	813-978-3044	Gift Selection Software
Bethesda Software	301-990-7552	Educational, Recreational Sftr
Big State Doors	512-376-5644	BBS Door Software
Bit Software	510-490-6637	BitFAX
Blackmond Software	505-589-0319	RAMail, CCTRX

Boca Research	407-241-1601	Memory Cards, Modems
Borland	408-439-9096	C, Quattro, dBASE
Bottom Line Software, Inc	214-394-4170	Loan Accting & Calc Software
Bourbaki	208-342-5823	Fractools
Broderbund	415-883-5889	Printshop & Others
Brightbill Roberts	315-472-1058	LAN Server, Net Remote
Brightwork Development	914-667-4759	Networking Utilities
Brown Bag Software	408-371-7654	Powermenu
Buerg Software	707-778-8944	List Software
Bureau Of Electronic Publ	201-808-0085	Educational CDROMs
Buttonware	206-454-7875	Pcfile, Pccalc, Pcwrite
Cabletron	603-335-4803	Network Cards
Calcomp	714-236-3045	Digitizers
Calera Recognition Systems	408-773-9068	OCR Software
Campbell Services	313-559-6434	Ontime Scheduler
Canon Computer Systems Inc	714-438-3325	Canon Computers
Canon Printer Division	516-488-6528	Laser, Bubble Jet Printers
Canon Printer (Italy)	+39-2-58010997	Laser, Bubble Jet Printers
Capstone	305-471-8962	Educational, Entertainment Sftr
Cardinal Technologies	717-293-3074	Cardinal Modems/FAX
Cardz	604-734-5400	Fracterm Comm Software
Castelle	408-496-1807	LAN, Gateway Hardware
CBIS, Inc	404-446-0485	Network, CDROM Sharing
cc:Mail	415-691-0401	CC:Mail E-Mail
Central Point	503-690-6650	PC Tools
Certus	408-973-9834	Supernovi
Cheyenne Software	516-484-3445	Netware Tape Backups
Chinon America	310-320-4160	CDROM, Floppy Drives
Chipsoft	619-550-5018	Memory
Chwatal Development Co	318-487-0800	Ultrabbs
Cirrus Logic Corp	408-943-4179	Video Boards
Citizens America Corp	310-453-7564	Printers
Citrix Systems	305-346-9004	Networking Software
Clarion Software	305-785-2594	Report Writer
Claris Corp	408-987-7421	Filemaker/clarisworks
Clark Development Corp	801-261-8976	Pcboard Bbs Software
Clear Software	617-965-5406	Clear, All Clear
Cleo Communications	313-996-1213	Lan & Multiuser Boards
CMS Enhancements	714-222-6601	Hardware, Drives
CNET	408-954-1787	Networking
Coconut Computing Inc	619-456-0815	Coconet Bbs Software
Codenoll	914-965-1972	Networking Boards
Colorado Memory Systems	303-635-0650	Tape Backups
Columbia Data Products	407-862-4724	Scsi Drv'S For Wd-7000
Communications Research	708-933-5333	Terminal Emulators
Compaq Computer Systems	713-378-1418	Compaq Drivers & Utils
Complete PC	408-434-9703	Modems,fax,scanners
Comprehensive Video Supply	201-767-7990	Edit, Log, Script Master

Compton's New Media	619-929-2597	Multimedia Products	EDS Development	812-423-3394	Eds Software Programs
Computers International	213-823-3609	Online Shopping Software	Elan Software	310-459-3443	Goldmine Software
Computer Peripherals	805-499-9646	Modems	Elite Business App's	410-987-2335	Ramjet
Computer Support	214-404-8652	Arts & Letters Software	Emac/Everex	510-226-9694	Trackball, Modem
Computone	404-343-9737	Intelligent Serial Card	Emerald Systems	619-673-4617	Data Management
Comtrol	612-631-9310	Intelligent Serial Card	Enable Software	518-877-6316	Enable Business Software
Conner International	408-456-4415	Hard Drives	Envisio	612-633-0051	Macintosh Storage Units
Conner Peripherals	407-263-3502	Peripherals	Epson America, Inc	310-782-4531	Epson Computer Products
Core International	407-241-2929	Hard Drives	Equinox Systems, Inc	305-791-1633	Multiport Comm Ports
Corel System	613-728-4752	Corel Draw	eSoft Inc	303-699-8222	TBBS BBS Software
Cornerstone	408-435-8943	Single/dual Pg Monitor	ETS Incorporated	801-265-0919	GUI & Laser Printer Apps
Corvus System, Inc	408-972-9154	Net Software	Excalibur	408-244-0813	Vsumx Virus Software
CoStar	203-661-6292	Address Writer/labeler	EZX Publishing	713-280-8180	EZ-Form, EZ-Diskcopy
Covox Corpoartion	503-342-8261	Sound Cards	Family Scrapbook	904-249-9515	Family Scrapbook
Creative Labs	405-742-6660	Soundblaster Music Card	Farallon Computing	510-865-1321	Networking Products
Cross Communications	303-444-9003	Cross Connect	Fifth Generation Systems	504-295-3344	Fastback, London Bridge
Crystal Services	604-681-9516	Software	Folio aba Paisasa A became	801-375-9907	Mailbag
CTX International	909-594-8973	Monitors	Foresight Resources	816-891-8465	Drafix Cadd Software
Cumulus	216-464-3019	Memory, Boards	Frederick Engineering, Inc	301-290-6944	Datacomm Analyzer
Cyrix Corporation	214-680-3187	Cyrix Cpu'S & Mathco'S	Fresh Technology	602-497-4235	Map Assist, Network Software
DAC Software	214-931-6617	Dac Easy Accounting	Future Domain	714-253-0432	Tape Backups
DAK Online Resource Center		All Dak Products	FutureSoft Engineering	713-588-6870	Dynacomm
Dariana Technology Group	714-994-7410	System Sleuth	Galacticomm	305-583-7808	Major BBS Software
Darwin Systems	301-251-9206	Darwin Bbs List	GammaLink	408-745-2216	GammaFAX, Addon Boards
Data Access	305-238-0640	Dataflex	GAP Development Company	714-493-3819	GAP BBS Software
Data Access Datadesk/Prometheus	503-691-5199	Keyboards/trackballs	Gateway BBS	605-232-2109	Gateway Computers
DataEase Int'l	203-374-6302	Dataease, graftalk	Gateway Communications	714-863-7097	Network Hardware
	407-649-3159	Dataman Products	Gazelle Systems	801-375-2548	Backit, Optune, Q-DOS
Dataman Dataman Corp.	818-887-8167	Dataproducts Printers	GEcho	316-263-5313	Fido Mail Processor
Dataproducts Corp	314-875-0503	Procomm Plus	General DataComm Ind	203-598-0593	Modem, Multiplexors, LAN
Datastorm DataWatah	919-491-1602	Citadel,screentalk,vitex	GEnie Information Services	800-638-8369	GEnie Online Service
DataWatch Data Tashaslasi	408-942-4010	Hd Controllers	Genicom	703-949-1576	Printers & Hardware
Data Technology	408-720-0406	Networking Hardware	Genoa Systems	408-943-1231	Tape Backups
David Systems		Localtalk.e-net For Mac	Gensoft Development	206-562-9407	Supercalc
Dayna Communications	801-268-7389	Crosstalk/irma	GeoWorks	510-549-1884	GEOworks
DCA	404-740-8428		GeoClock	703-241-7980	GEOclock Software
DEC PC Support	508-496-8800	Dec Computers Dell Mail Order Clones	Gibson Research	714-362-8848	Spinrite
Dell Computer Corp	512-338-8528		GigaTrend, Inc	619-931-9469	High Capacity Hard Drive
Delphi Delphi	800-365-4636	Delphi Online Service Fax & Forms Software	Global Village Comm	415-390-8334	Teleport, powerport
Delrina Technology Inc	416-441-2752	Telix Comm Software	GoldDisk	416-602-7534	Anim. Works, Video Dir.
DeltaComm Development	919-481-9399		Goldstar Technologies	408-432-0236	Monitors & Computers
DeScribe	916-929-3237	Describe Word Processor	Graphic Workshop	416-729-4609	Graphic Workshop Program
Diagnostic Technologies	905-607-6570	Diags & Schematics Qaplus, Peace Of Mind	Great American Software	603-889-7292	One-Write Plus Accnt
DiagSoft Diagsoft	408-438-8997		Gupta Technologies, Inc	415-617-4700	SQL Windows
Diamond Computer	408-524-9301	Video Boards	GVC Technologies	201-579-2380	Modems
Digiboard	612-943-0812	Intelligent Serial Card	Gwynn's Communications	703-494-0098	Communications Drivers
Digital Communications	513-433-5080	10-net	Hayes Microcomputer	800-874-2937	Modems
Digital Research	408-649-3443	Dr Dos	Hayes Microcomputer	404-446-6336	Modems
Digital Theatre	404-446-0485	CDROM M/media Apps	Hazard Soft	405-243-3200	Windows Software
Digital Vision	617-329-8387	Video Imaging		206-869-2418	Windows Software Windows Env Software
Disk Technician Corporation	619-272-9240	Disk Technician Gold	HDC Computer	718-392-4054	Netroom Software
Disney Software	818-567-4027	Kids Software	Helic Software Hercules Computer	510-623-7449	Memory Exp, Video Cards
Distibuted Processing Tech	407-831-6432	Controller Cards			
D-Link Systems, Inc	714-455-1779	Network Print Server	Hewlett Packard BBS	208-344-1691	Printers, Computers, Software Monitors
DNA Networks, Inc	215-296-9558	Micronet Network	Hyundai Electronics Amer	800-955-5432	
Dove Computer	919-343-5616	Modems, FAX Boards	IBM Canada	919-517-0001	IBM Computer Products
DSP Solutions	415-494-1621	Portable Sound+ / Show&tell	IBM Canada	905-316-4244	IBM Computer Products
DTK Computer Inc Of Texas		Motherboards, I/O Cards	IBM AntiVirus Netherlands	+31-79-223300	IBM Antivirus
Dudley Software	615-966-3574	Doorway Software	Intelligent Graphics Corp	408-441-0386	VM386, Multitasking
Dynamic Microprocessor	516-462-6638	Computer CPUs	IMC Networks	714-724-0930	LAN Network Equipment
E-Machines	408-541-6190	Monitors, Video Hardware	IMSI Software	415-454-2893	Desktop Publishing
Eagle Technology	408-453-0734	Network Products	Infinity Computer Services	215-965-8028	Bar Code Products
EagleSoft	812-479-1310	Shoppers Asst, Callaway	Infochip Systems	408-727-2496	Memory

Informix	913-492-2089	Smartware, Informix	Meridian Data	408-439-9509	Networks
InfoShare	703-803-8000	Falken BBS Software	Micro Display Systems	612-438-3513	Monitors
Innovative Data Concepts	215-357-4183	TCZL	Micro Help	404-516-1497	Uninstaller
Inset Corporation	203-740-0063	Hijaak Graphic Conversn	Micro Solutions	815-756-9100	Parallal Hard, Tape Drives
Insignia Solutions	415-694-7694	Access PC, Soft PX	Microcom	617-255-1125	Carbon Copy, Workmanager
Intel savidos exencus alda	503-645-6275	Mathco, Modem, FAX, Chips	Microdyne	703-760-8509	Network Hardware
Intel Application Support	916-356-3600	Intel Motherboards	Micron Technology	208-465-7755	Micron Computers
InterPlay Productions	714-252-2822	Entertainment Software	Micronics	510-651-6837	Computer, Motherboards
Intracorp	305-378-8793	Travel Partnet	Micropolis Corp	818-709-3310	Hard Drives
Iomega	801-778-4400	Tape Backups	Microrim	206-649-9836	R:base
IQ Software	206-821-5486	LAN & Multiuser Boards	MicroProse	410-785-1841	Gaming Software
Irwin Magnetics	407-263-3662	Tape Backups	Microspeed	510-490-1664	Peripherals
Jetfax Jetfax	415-324-1259	Jetfax Boards	Microsoft	206-936-6735	Microsoft Software
Jetform	613-563-2894	Jetform Design	Microsoft	905-507-3022	Microsoft Software
JDR Microdevices	408-494-1430	Mail Order Componets	Microsystems Software	508-875-8009	Calander Scheduler
Kent Marsh	713-522-8921	Mac Security Software	Microtech	203-469-6430	Mac Memory
Kenwood Italy	39-229516558	Kenwood Amatuer Radio	MicroTek Lab	310-297-5102	Scanners
Keyfile	603-883-5968	Keyfile Software	Microtest	602-996-4009	Lanport
Kingston Technology	714-435-2636	Memory Products	Mitsubishi	714-236-6286	Monitors
Knowledge Adventure	818-248-0166	Educational Software	Mountain Network Solutions	408-438-2665	Tape Backups
Kodiak Technology	510-659-0857	Network Hardware	Mouse Systems (MSC)	510-683-0617	Mouse
Kurta Corp	602-243-9440	Digitizer Boards	Multi-Tech Systems	612-785-9875	Modems
LAN Master	817-771-0233	Remote Access Software	Mustang Software	805-873-2400	Wildcat, QModem, OLX
LAN Systems	801-373-6980	Networking Hardware	Mutant Group	405-372-6621	Mutant BBS Software
LAN Works	416-238-0253	Proms Managaleved MAD	Mustek Inc	714-453-1210	Scanner Products
Laser Go	619-450-9370	Goscript	Mylex	510-793-3491	Motherboards
Laser Master	612-835-5463	Laser Printer Software	National Semiconductor	408-245-0671	Ethernode, Mainlink
Lattice	708-916-1200	Lattice Software	NCD Distribution	305-599-0749	Full Product Line
Leading Edge	508-836-3971	Computer Systems	NEC Technologies	508-635-4706	Computer, Printers
Lexmark	606-232-5238	Printers, Keyboards	Network Products Corp	818-441-6933	NCSI, ACS2, NMP2, XCS2
Liant Software	206-236-6485	Language Software	NetWorth	214-869-2959	Ethernet Cards
Lightning Communications	714-457-9429	Communications Software	New Media Graphics	508-453-0214	Video Capture Boards
Link Technologies	510-623-6680	Terminals amples and a	NewGen	714-641-3869	Printers, Plotters
LlanoWare Doors	805-264-0443	Ra BBS Doors & Utils	Night Owl BBS	716-881-5688	Night Owl CDROM Disk
Locus Computing	310-337-5995	Software, Comm., Network	NISCA	214-446-0646	Scanners
Logical Connection	504-295-3344	Logical Connection	Northgate	612-361-5217	Northgate Computer Systems
Logitech	510-795-0408	Mouse, Scanners	Norton-Lambert	805-683-2249	Close-Up/LAN
Lotus Company of the	617-693-7001	Lotus Spreadsheet	Novell	801-429-3308	Novell Networking
Lotus nomenance	404-395-7707	Lotus Word Processing	Novell Desktop Systems	408-649-3443	Computers
Lucid III capit impoWim	214-994-8125	Lucid 3D	Nuiq Software Inc	914-833-1479	Powerboard BBS Software
Mace, Paul Software	503-482-7435	Mace Utilities	Number Nine	617-862-7502	Advanced Video
Madge Networks	408-955-0262	Token-ring Products	Ocean Isle Software	407-778-2407	Rewritable Disk Drives
Magee Enterprises, Inc	404-446-6650	Automenu, Treeview	OCR Systems	215-938-7245	Readright
Magitronic Technology	516-454-8262	Motherboards	Okidata	609-234-5344	Printers
Magnavox	310-532-6436	Computers, Monitors	Olicom	214-422-9835	LAN & Multiuser Boards
Main Lan	407-331-7433	Mainlan	Omen Technology	503-621-3746	DSZ - Zmodem Protocol
Mannesman Tally	206-251-5513	Printer Access	Ontrack Computer Systems	612-937-0860	Hd Prep. Software
Mansfield Software Group	203-429-3784	Kedit For DOS & OS/2	Open Network	718-638-2239	Networking
Manugistics	301-984-5222	Software	Orchid Technology	510-683-0555	Video Cards
Manx Software Systems	201-542-2793	Aztec C	Origin	512-328-8402	Gaming Software
Martek	714-453-1210	Scanners	Pacific Data Products	619-452-6329	Laser Printer Products
MASS Microsystems	408-522-1248	Storage Devices	Pacific Microelectronics	415-941-9699	Mac-in-dos, Common Link
Masterclip Graphics	305-967-9453	Business Graphics Software	Packard Bell	818-313-8601	Computer Systems
Mathematica	813-683-6840	Mathematica Software	Palindrome	708-505-3336	Network Software
Matrix Technology	617-569-3787	Software	Panasonic	201-863-7845	Printers, Scanners, CPUs
Maxi Host Support	209-836-2402	Maxi Host BBS Software	Paperback Corporation	415-644-0782	Software
Maxis Software	510-254-3869	SIMEarth, SIMCity, SIMAnt	Paradise Systems	714-753-1234	Video Cards
Maxtor/Miniscribe	303-678-2020	Hard Drives	Patton & Patton Software	408-778-9697	Flow Charting Software
Maynard Electronics	407-263-3502	Tape Backups	Pentax Technologies	303-460-1637	Scanners, Laser Printers
McAfee Assoc	408-988-5138	Virus Protection	Peripheral Land	510-651-5948	Data Storage Products
Media Vision	510-770-0968	Multimedia Products	Persoft Software	608-273-6595	Smart Term Software
Megahertz	801-273-6649	Modems	Phoenix Technologies	714-453-8619	Motherboard BIOS

Pinnacle Publishing	206-251-6217	Data Storage Products	TheSoft Programming	415-581-3019	TheDraw Ansi Software
Pinpoint Publishing	707-523-0468	Micro Cookbook	Thomas Conrad	512-836-8012	Networking Cards
Pioneer Software	919-851-1381	Q & E Software	Thumper Technologies	918-627-0059	EZ-Reader
PKWare	414-354-8670	Pkzip Compression	Thunderbyte USA	302-732-6399	Thunderbyte Anti-Virus
PLI	510-651-5948	Removable Media	Tiara Computer Systems	415-966-8533	Networking Cards
Plus Development	408-434-1664	Hard Drives	Timeline Software	415-892-0408	Schedulers
Polaris Software	619-592-2674	Packrat Software	Timeslips	508-768-7581	Timeslips Software
Powercore	815-468-2633	Network Sched 3/ WinMail	Tool Technology	415-289-7414	Wintools
Practical Peripherals	805-496-4445	Modems	Tops microsystems	510-769-8774	Network OS, E-mail
Priam Systems	408-434-1646	Hard Drives	TopSoft Software	502-425-9941	BBS Doors, Toped
Princeton Graphic Systems	404-664-1210	Monitors	Toshiba Printer Products	714-538-3000	Printers
Procom Technologies	714-852-1305	Hardware Support	TouchStone Software	714-969-0688	Check It Software
Prometheus Products	503-691-5199	Fax, Modems	Trantor Systems	510-656-5159	Parallel SCSI, Vidoecard
Promise Tech	408-452-1267	Caching Disk Controllers	Traveling Software	206-485-1736	Laplink, Battery Watch
Proteon	508-366-7827	Networking Boards	Trident Microsystems	415-691-1016	VGA Cards
Public Brand Software	317-856-2087	Shareware Software	Trio Information Systems	919-846-4987	Datafax OCR
Pure Data	214-242-3225	Networking Boards	Triton Technologies	908-855-9609	CO/Session
Qmail	901-382-5583	Qmail Offline Reader	Trius	508-794-0762	Aseasyas Spreadsheet
QMS	205-633-3632	Printers	True Vision	317-577-8783	Display Accelerator
Quadram	404-564-5678	Memory Software	TSR Systems	516-331-6682	Palcom-paradox Compiler
Qualitas	301-907-8030	386max & Bluemax	Tseng Labs, Inc	215-579-7536	Tseng Video Products
Quantum	408-894-3214	Hard Disk Storage	Turbo Tax	619-453-5232	Turbotax Software
Quarterdeck Office Systems	310-314-3227	Qemm386	TurboCom	503-482-2633	Comm Driver For Windows
Quercus Systems	408-867-7488	Rexxterm	Turtle Beach	717-845-4835	Windows Software
Quess Micro	719-597-8670	Telemagic & Add-ons	UltraStor	510-623-9091	Mass Storage Interface
QuickBBS	407-896-0494	Quickbbs BBS Software	Unicorn Software	317-784-2147	Unicorn Software
Racal Interlan/Rabbit Soft	508-264-4345	Networking Cards	UniNova Service Corp	509-925-3893	Hardware, Software
Race	305-271-2146	Race User Editor (ra)	US Robotics	708-982-5092	Modems
Rams' Island Software	303-841-6269	Incontext	US Sage	417-331-7433	Mainlan Network
Reference Software	801-225-4444	Grammatik	ValuStor	408-945-8376	Floptical, Tape Backup
RelayNet National	301-229-5623	Relaynet Mail System	Velocity	708-991-0597	Software
Remote Control Int	619-431-4030	Telemagic	Ven Tel	408-922-0988	Modems
Revelation Technologies	206-641-8110	Advanced Revelation	Ventura Software	619-673-7691	Ventura Publisher
Rix Softworks	714-476-0728	Paint Software	Vermont Microsystems	802-655-7461	Hires Video Boards
Rybs Electronics	303-443-7437	Memory Manager	Video Seven	510-656-0503	Video Cards
Saber Software	214-361-1883	Saber Network Menu	Viewsonic	909-468-1241	Monitors
STB Systems	214-437-9615	Video Cards	Virex	919-419-1602	Virus Detection
Storage Dimensions	408-944-1221	Storage Devices	Virgin Software	714-833-3305	Entertainment Software
Streamline Design	905-793-1411	SDP, Visualink, Clickcomm	Virtual Technologies	210-787-8974	Virtual Bbs & Utilities
Summit Memory Systems	408-439-6774	Tape Backups	Visual Business Systems	404-953-1613	Video
Sunrise Software	404-256-9525	Sunrise Door Software	Volkswriter	408-648-3015	Volkwriter Software
Sunriver	512-835-8082	Unix Systems	Vortex Systems	412-322-3216	Retrochron Backup
Supermac Software	408-541-6190	Spectrum Board, Monitors	Wacom	415-960-0236	Graphic Tablets
Supra Corp	503-967-2444	Modems	Walker, Richer, & Quinn	206-324-2357	TCP/IP Software
Sydex	503-683-1385	Shez	Walt Disney Software	818-567-4027	Childrens Software
SyDOS	407-994-4367	Optical Media Products	Wangtek	800-344-4463	Tape Drives
Symantec	503-484-6669	Norton,pcanywhere	Wantree Development	913-441-0595	Remoteaccess BBS
Synopsys	408-970-3719	S3 VGA & Other VGA Cards	Weitek	408-522-7517	Math Coproc
Sysgen	408-946-5032	Drive Controllers	Western Digital	714-753-1068	Controllers, Hard Drive
Systems Compatibility	312-670-4239	Software Bridge, Toolkit	White Water Systems	708-328-9442	Zortech, Actor
	510-656-0473	Removable Mass Storage	Whole Counsel Ministries	804-590-1659	Bible Doors, Network Listing
Syquest Swan Technologies	814-237-6145	Swan Computers	Willow Peripherals	718-993-2066	Laptop TV, Publisher, VGA TV
TAG BBS	313-582-6671	Tag Bbs Software	Word Perfect Corp	801-225-4444	Wordperfect, Drawperfct
			Wordtech	415-254-1141	Dbxl, Quicksilver
Tallgrass Technologies	913-492-8757	Controller, Filesecure	WorldWide Video	201-491-5147	Video Hardware
TEAMate Technology Concents	213-318-5302	Teamate Unix BBS			
Technology Concepts	503-691-5199	Fax Line Manager	Wyse	408-922-4400	Terminals, Computers
Tecmar	800-344-4463	Tape Backups Printers Plotter Products	Xircom	818-878-7618	Network Adapters
Tektronixs	408-685-4504	Printers, Plotter Products	Xyquest Zonith Data Systems	508-667-5669	Correct Grammer
Telebit	408-745-3861	Modems Talix Comm Software	Zenith Data Systems	708-808-4942	Computer Systems
Telix Support	919-481-9399	Telix Comm Software	Zenographics	714-851-3860	Pixie, Super Queue
Template Garden Software	212-627-5089	The Documentor	Zoneware	414-461-9702	Bbs Door Software
Texas Instruments	512-250-6112	Printers, CPUs	Zoom Telephonics	617-423-3733	Modems

sysop membership

payment method

I want to support EFF at the following level:

Sysop \$10 • Regular \$40 • Other \$

- ☐ Enclosed is a check payable to the Electronic Frontier Foundation
- ☐ Please charge my:

MasterCard • Visa • AmEx

Number:

Expiration Date:

Signature:

contact information

Name:

BBS Name:

Mailing Address:

Voice Telephone:

Internet E-mail:

Fax Number:

Network Addresses:

Operating System:

bbs directory

Sysop:

Voice/Support Numbers:

Mailing Address:

Data Phone Numbers:

BBS Software:

Number of dialup lines/nodes:

Internet Connected?:

•mail/news

•full connectivity

Focus/Special Interests:

Special Access Requirements:

Modem Type/Speed/Protocols:

Provides:

•text files

•shareware

•graphics

networked conferences

doors

•networked e-mail

special pay-only services

Fees:

mail to

Sysop Members, EFF, 1001 G Street, NW, Suite 950 East, Washington, DC 20001

LAND-O-NANDO

by Brian Gallagher

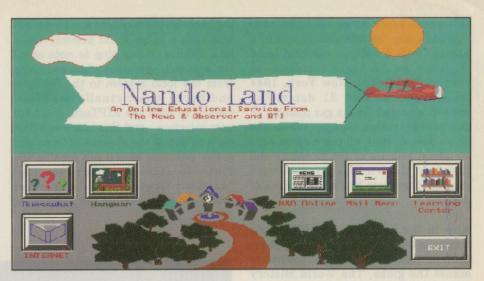
More modems, more lines, more callers - a situation every sysop loves to have. Dave Livingston knows the story well as his board, NandO.net, (919)829-3560, associated with the local newspaper, "The News & Observer," of Raleigh, North Carolina has gone through a phenomenal growth spurt from five lines on February 14, 1993 when the system first opened, to 105 lines today - and you can still get a busy signal.

The project began with two major goals: one, to provide Internet access to the community; two, to distribute the newspaper online. For Livingston himself, the goals reached somewhat further. He wanted to make the board more attractive than the printed version of the newspaper and more entertaining than television. His theme is, "content is king."

The board, running Galacticomm's Major BBS software, has had a direct Internet connection, via the newspaper, from the day it opened - telnet: camelot.nando.net. And The News & Observer's interest and bankrolling of the project doesn't hurt one bit. A family owned publication, the current executive editor Frank Daniels III interest in the online world has been a major factor in building the board to its current status.

Daniels, is one of the first editors in the nation to list his e-mail address in the masthead of the publication and all of the writers and columnists' e-mail addresses are listed as well. In fact, while vacationing in Wyoming, Daniels, who carries a laptop with him and has his own forum on the BBS, responded to a subscribers e-mail via his editorial department the next day - a fine example of telecommuting at its best.

As newspapers are traditionally and necessarily community oriented, so is the board. Subscribers, \$20 per month for full, unlimited access, will receive five different user IDs per household and free subscriptions are offered to children during non-peak (7:00 am to 4:30 pm) hours with many finding the Internet and online libraries a great help when working on school projects. The children's area, titled "NandOland"



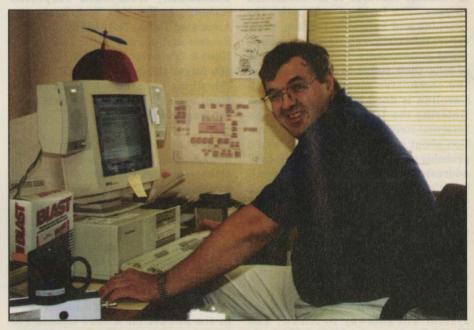
NandOland-Free Children's area on well-connected BBS

offers a wide array of networking and resource options including Internet gophers and K-12 Net with the noted exclusion of most games. Since the board is used in the local school system for research, Livingston didn't want students playing when they should be studying.

The disabled are also given free subscriptions to the system with no limitations whatsoever. One of their favorite areas are the project Gutenberg books found under the "Learning and Reference" icon from the top menu. Livingston has received many accolades from the disabled community saying he has "changed their lives" through the board, as now, those who have only a

head-stick for motion, can turn the pages of a book without any assistance. Entering the learning and reference area, RIPed to look like a mini library, callers are greeted by a menu with a slew of options. Under the fiction area are titles such as: War of the Worlds, A Christmas Carol, Prisoner of Zenda, The Scarlet Letter and Tom Sawyer Abroad among others, which can be readily pored through, in addition there is a separate area for the works of Edgar Allen Poe. If this isn't enough, the "Bookshelf," "Internet Reference Shelf" and the catalog for the Wade county Libraries are also accessible.

Clicking the bookshelf icon gateways callers to a gopher site with 223 different topics. These topics, in turn have more listings under them. The



Dave Livingston of NandO.net hard at work

Holocaust topic listed 43 additional resources, one, treblinka.gas2, excerpted a passage from Treblinka survivor Jacob Wiernik's book "A Yor in Treblinke," (A year in Treblinka), New York, 1944 from pages 20 and 21 describing removing corpses from a gas chamber in the concentration camp: "When the doors were opened, all the corpses were standing; because of the crowding and the way the victims grasped one another, they were like a single clock of flesh."

Also in the Learning and Reference section is the World Atlas offering information about hundreds of countries across the globe, The World History Calendar, a resource akin to what many newspapers use to list interesting historical tidbits that happened on a particular date, (i.e. on December 7, besides the bombing of Pearl Harbor in 1941, it is Independence day for the Ivory Coast and Panama, Delaware Day in Delaware, the day residents of Fiji celebrate the prophet Mohammed's birthday, and the birthday of Harry Chapin, born in New York City, 1942). Under American History, important documents pertaining to this country's past including the Constitution, the Declaration of Independence, the Mayflower Compact, the Gettysburg Address, Dr. Martin Luther King's "I have a dream," speech from the 1963 march on Washington, and the Emancipation Proclamation among many others are found.

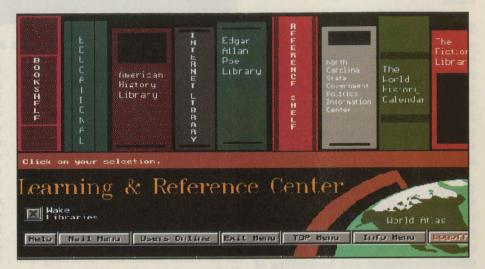
A valuable resource to all concerned citizens "The Insider," still under the Learning and Reference heading, gives callers information on state, federal and world governments. Browsing the text of bills, their status in committees and the committee members for North Carolina is done quickly and easily. Entering the U.S. area here (via the Internet) connects you to more information about our government than you'd probably care to know, (including e-mail addresses of congressional members), but it's there and even offers to connect you to FedWorld, via the Internet fedworld.gov, (the BBS number is (703)321-8020, the mammoth BBS run by the Commerce Department with yet another 130 government boards reachable through that system.

For those with a more worldly view, the system will gateway to NATO, The World Bank, or the United Nation's

gophers - giving access to more information than a caller could possibly digest in a lifetime. Something to note about the system's operation when switching from the local system to the Internet and back, it is virtually seamless. Calling in with the RIPTerm graphical user interface - and this board is RIPed up, you notice the absence of icons and pretty pictures, were it not for this and the header at the top of the screen titled "Internet Gopher" - you may never know you were surfing the Internet at all.

time? All yours, for the low, low price of just \$24,000.

There are, of course, the more traditional BBS attractions here as well. The file library consist of 70,000 files, much of it ASP approved shareware, as well as files on topics ranging from the Grateful Dead, Star Trek and Sports, to the Internet, Netware and stuff for teachers and writers too. There are 14 games on the system including Tradewars, Mutants, Welderlands, and Hangman, as well as a chat area with a constant 15 nightly devotees.



NandO.net's Impressive Learning and Reference Center

The "NandO News Overnight" option, offers a daily encapsulation of events compiled by night editor for the News and Observer, Joe Sterling (sterling @nando.net), from such respected resources as The New York Times, the Associated Press, The NEWS Network, Reuters and of course, the staff of the News & Observer. For sports buffs, let's not forget the sports area filled with everything the armchair athlete could want, currently boasting the only baseball league available - fantasy.

In addition to the approximately 2,500 newsgroups, (none of which are the alt.hamster.ducttape variety), and 1,000 hypertext pages of WWW stuff, NandO.net also offers the largest online classified advertising section in the south culled from the News & Observer newspaper. I didn't bother counting the numerous listings or areas that scrolled across my screen, but if you're looking for a house, a car, a job, a thingamajig, or whatchamacallit, you'll find it here. In the market for a 1967 Cessna 172 airplane with only 1500 hours of flight

Livingston, a retired Master Sergeant for the Air Force has been working in telecommunications for as long as he can remember and thinks of his job as Chief Engineer for NandO.net, as getting paid for his hobby. He is in the process of installing a FidoNet link, and a Planet Connect Satellite feed, more fuel for minds that want to know. With these additions and what is already on the system, if as Livingston says, "content is king," someone should give this man a crown. And kudos to Daniels, for being an executive editor with an ear and a wallet geared towards the electronic community, and the seven other staff at the paper who make this system smooth as silk.

The News & Observer's NandO.net, Dave Livingston Chief Engineer; (919)829-3560 BBS; telnet: camelot .nando.net; (919)829-4836 voice; (919) 836-2814 fax; 127 West Hargett Street, Suite 200, Raleigh, N.C. 27601.

ELBOW LAKE - A CONNECTED COMMUNITY

by Brian Gallagher

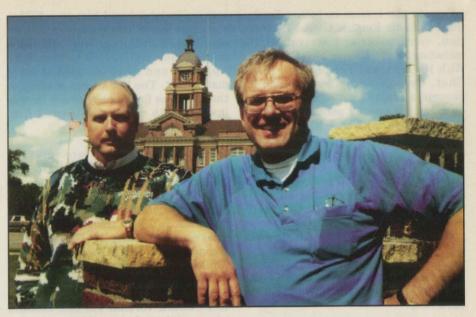
In the agricultural community of Elbow Lake Minnesota, population 1,200 give or take a few, time passes as slowly as corn growing in the fields and wide open spaces and fresh air are an abundant commodity. Catching crappies or sunfish - both pan fish, walleye or northern pike - up to 10 pounds, is a pastime many enjoy as everyone knows Elbow Lake has some of the best fishing in the state.

There isn't a single traffic light in the whole of Grant County, of which Elbow Lake is a part, and it seems that most vehicles either have a truck bed behind the steering wheel or a plow. Underneath this pleasant, peaceful exterior are the rumblings of a city and community on the move. About 10 years ago an effort began to attract business to Elbow Lake because it was well known among residents that once a child graduated school they moved on to one of the cities to find employment because there simply wasn't any work back home.

Well, business came to Elbow Lake, and that's good, but it is mostly along the industrial/manufacturing line, and what the city is really looking for is technology. The idea of telecommuting, something the Minnesota Department of Transportation has been pushing for over the last year to relieve the crowded rush hour highways and byways of Minneapolis St. Paul, seemed to hold a glimmer of hope for expansion minded Elbow Lake residents, just two hours and a half hours north west of the metropolis. Thanks to the help from a California refugee, their high tech dreams may be coming true.

With the fires from the Los Angeles Rodney King riots still burning brightly in his rear view mirror, Rick Wooton, a displaced aerospace engineer finally had enough of earthquakes, unemployment and life in California in general. He made his way across the country and arrived in Minnesota with fresh air in his lungs, \$15 in his pocket, and an idea in his head.

A sysop or co-sysop of numerous California boards in the late '80s and early '90s including the Fireside Lounge in Los Angeles, the Feminine Connection also in Los Angeles, and the 16 line Surfside in Ventura County - Wooton



Jeff Holsen, City Clerk (left), and Gene Wenstrom, Economic Development Director for Elbow Lake, MN

knew his way around the BBS world pretty well when he arrived in Minnesota and naturally wanted to set one up in his new home - which he did. The system opened in July of 1993 with two lines, and got a lot of attention when a story about Wooton, his wife Kathy and their BBS was published in a local paper.

The interest piqued by the story soon had Wooton and the city of Elbow Lake looking towards a grander scale of things. Jeff Holsen, the City Clerk, called it a "combination effort." The Economic Development Authority for the city found its way to lend \$50,000 to the system to get the board up and running. Gene Wenstrom, Director of the Development Authority, said it was felt among the four city council members and the mayor that they didn't want to be by-passed by the information flow and they didn't want their children to be left out either. "(Now) our kids will be as well trained to navigate the Internet as anybody's," Wenstrom said. When the vote came up concerning the loan in the city council meeting, the result was a unanimous "yes."

Further helping the cause, the local school agreed to purchase an Internet leased line from Wooton's new company, 10,000 Lakes Connection, with a 15 year contract paid up front. In addition, the Runestone Telephone Association, a cooperative telephone company did its part by giving Wooton free installation for 50 telephone lines. as well as not charging for the first four months of service. Lee Meyers, the general manager for Runestone Telephone, said, the deal with 10,000 lakes would not only benefit the children of the community and the BBS, but their business as well.

After closing the deal with the city on May 11, 10,000 Lakes Connection opened in mid-July with a healthy 164 lines - 50 via 14.4 Supra modems, 82 via an ADP Autonet X-25 packet network giving the system local calling numbers in over 1,100 cities nationwide, and 32 telnet lines, bbs.tlcbbs.com.

The system itself is set up on Galacticomm's Major BBS running Durand Communications DCNet photographic database software. With all of the work that Wooton has spent securing funding and promoting the project he has had little time to fine tune the intricacies of the system itself. There are, however, 17,000 files on the system, with the 1,300 or so in the IBM area being the most popular, and they are currently installing 12 to 15 newsgroups.

The system has 391 forums of its own, ranging from Science and Medicine, Aviation and Air Craft to Jokes, Homebrewing and Marriage. Although the system's integrated RIP graphics operate smoothly and easily through the message base, the sparse traffic reminds one of those back country roads traveled by a very few who know where to go for the best hunting.

A big strength of the system is in the area of chat and games. There are 35

games on the system including Tradewars, Galactic Empire, Global Destruction, video poker and several MUDs including Blade Master and Kyrandia. With 164 lines, and Tim Stryker's Flash Chat, the system is well poised to become a major chatterhouse on its own, but for now 99 percent of all the Internet users go to IRC, (Internet Relay Chat), when they log on, Wooton said.

Subscriptions are \$6.50 per month, with full Internet access costing an additional \$12.00 per month. Call ADP Autonet for a local calling number in your area (800)521-2733. 10,000 Lakes Connection, attn: Rick Wooton, 32 Central Avenue South, Box 1016, Elbow Lake, MN 56531-1016; (218)685-6622 BBS; telnet: bbs.tlcbbs.com; (218)685-6852 voice.

PCs IN OHIO

by Brian Gallagher

Norm Henke, sysop of PC-OHIO (216)381-3320, in Cleveland Ohio, didn't learn computers in a classroom but, he did learn chemistry and it was the linking together of molecules that led him to ultimately link 50 486/33s together which are the bulwark of this 50 line PCBoard system.

In 1977 Henke started working for Cleveland Crystals, growing optical laser crystals (cadmium sulfide crystals) in a laboratory. Here, an electronics technician introduced him to a KIM 1 computer which was being used for an automated mailing list. Henke's interest grew and in 1980 he bought an Apple II, and likewise used it for a mailing list. The list he was mailing at the time was for a hobby group he was involved with concerning tropical fish; his favorite being angle fish.

When PCs rolled out late in 1981, Henke followed suit a year later. In 1983 he changed careers to computers and started doing private consulting, sales and technical support in the Cleveland area. In 1985 through a sales/technical support position Henke received a second PC, (a TAVA XT clone), which would eventually be the first node of PC-OHIO. On September 1, 1985 the board opened running RBBS, switching to PCBoard version 7.0 two months later as it was faster and supported a network.

Today callers have access to nine gigabytes of files on hard drives, 12 CD ROMs, all of the information available from a Planet Connect satellite feed, (including 20 networks), e-mail and 2,500 newsgroups via 30 U.S.Robotics dual standard, and 20 Hayes V.FC 28.8 Kbps modems. Henke planned to install a T-1 Internet connection when he moved to a new facility last fall but, with only one provider in the Cleveland area wanting \$10,000 to run the line, and another \$10,000 for a year's service, "the upfront costs were just too darned high," he said.

He is working on getting an ISDN connection which is supposed to be available in his area, only the people who should know where to find it can't. The BBS is housed in what used to be a mammoth, 50' x 70' carriage house, of which about half is now filled with the hardware for the BBS. In January of this year, Ohio experienced the coldest winter ever, with the mercury dipping to a Cray-like atmosphere of 27 degrees below zero. During this cold snap, with no external heat provided to the carriage area, the space, none-the-less, remained a steady 60 degrees just from the heat of so many machines.

PC-Ohio has **5,000** subscribers and **8,000** users in its database and takes **2,600** calls daily. Last year, after attending the ONE BBSCON show in Colorado Springs, Henke decided there was too much liability involved in keeping adult files on his system and removed them shortly thereafter. He estimates he lost 50 subscribers by removing the files but, he added, has a lot more religious and law enforcement subscribers now.

The most popular area on his board is pretty much a tie between messages and files, and the board has three mail doors to assist callers including, CAM Mail, Q-Mail and Silver Express. For Henke who long ago abandoned tropical fish as a hobby, and can't seem to find the time to devote to his other major interest science fiction with Star Trek and Doctor Who leading the way, computers reign complete. "Computers are my hobby, my pastime, my avocation...my everything," he said. Most of his time is spent reading the 20 to 30 messages directed to him personally and reading approximately 400 to 500 other messages everyday.

By the new year, Henke hopes to have all of his modems upgraded to the V.34 protocol and he is looking for some upgrades from PCBoard as well, specifically support for FidoNet and Internet. Something else he wants but isn't sure he'll get, is support for auto-generated RIP graphics.

Subscriptions are \$52 per year for 1 hour per day, or \$78 per year for two hours per day. Norm Henke, PC-OHIO, 23749 Cedar Road, Cleveland, OH 44122; (216)291-3307 voice; (216)381-3320 BBS.



Norm and Joyce Henke with son lan and the PC Ohio BBS

Starship II Gomputer Starship II BBS: (201) 985-1485

Starship II BBS: (201) 985-1485 Subscriber Line: (800) LOG-INTO

(800) 564-4686

INTERNET ACCESS: telnet starship.com

 FULL Internet Access! (FTP, Archie, Telnet, Gopher, Unix shells etc.)
 Online Chatting!

50,000 Adult Graphics!
 Multiplayer games!

• Adult Matchmaking! • 20 Gigabytes of files!

• E-mail/Message Areas!

*Now with International local access! For your LOCAL Starship access number, call: 1-800-521-2733 (in Canada, 313-995-6595). [Major/TBBS sysops, check out our Globalink Chat Service!]

AQUILA BBS

Chicagoland's Largest BBS

More Than 400 New Files Added Every Week!

▼ Over 120,000 Software Files and Programs Ready For Download

Access the latest shareware and public domain releases for DOS, Windows, Programming & OS/2.

▼ Online Publications

USAToday Decisionline, Local Weather, PcCatalog computer shopping, Boardwatch Magazine Online.

▼ E-Mail Message Conferences & Personal Internet E-Mail

2,000 + Conference E-Mail Topics and Personal Internet E-Mail Boxes - FREE with yearly subscription.

▼ Free Trial - File Downloads and System Demo on Your First Call!

Subscription Rates as low as \$8.95 give access to over 30 meg. of file downloads and over 15 Hours.

Modem (708) 820-8344

Aquila BBS - 4430 East New York St. Ste. # 201, Aurora, IL 60504 - Voice (708) 820-0480

Copyright 1994 @ Aquila BBS, Inc.

Online Since 1987



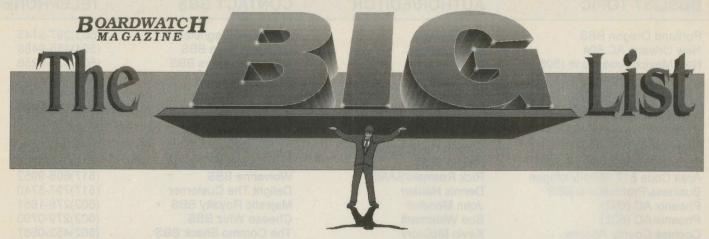
BOARDWATCH List of BBS List Keepers

This listing comprises a list of those who compile and maintain lists of bulletin boards, either by topical category, or by some geographic area or definition often by area code. The primary bulletin board system where the list can be downloaded electronically is also included.



BBSLIST TOPIC	AUTHOR/EDITOR	CONTACT BBS	S TELEPHONE		
New Jersey BBS's	Scott Drake	T.E.R.N. BBS	(201)399-4772		
Connecticut AC 203	Kevin Brook	Creative Edge BBS	(203)743-4044		
BBS With Handicapped Focus	Bill McGarry	Handicap News BBS	(203)926-6168		
Known Networks	Victor Laking	eneric BBS	(204)475-5199		
Manitoba, Canada List AC 204	Victor Laking	Generic BBS	(204)475-5199		
Seattle AC 206/West Washington	Bob Dinse/Nanook	Eskimo North	(206)367-3837		
Tacoma Washington AC 206	Richard Langsford	AmoCat BBS	(206)566-1155		
Puget Sound Area	Art Tomlin	Orion Station	(206)675-0565		
Kitsap County Washington	Michael Schuyler	Quicksilver BBS	(206)780-2011		
Maine 207	Scott R. Bodeen	Street Corner BBS	(207)442-0997		
Modesto, CA BBS List	Chris Mitchell, "Gomba"	Anything Goes	(209)491-0782		
Central California AC 209	Jack Porter/Madera UG	Zen Den Systems	(209)675-8436		
Graphical User Interface BBS	David Shapiro	The Gooey (GUI) BBS	(212)876-5885		
96 List - 9600+bps BBS	Ken Sukimoto	Downtown BBS	(213)484-0260		
Dallas/Ft.Worth BBS List	Mark Elson/Mike Shockley	Blues Cafe	(214)638-1181		
Open Access UNIX Site List	Phil Eschallier	LGNP1 (login:BBS)	(215)348-9727		
Cleveland Area 216	Jim Barry	Flip Flop	(216)951-9134		
Educational BBSs	Joe McIntosh	KSI Public BBS	(219)626-2150		
Educational and Indianna BBS	Joe McIntosh	KSI Public BBS	(219)626-2150		
Conservation/Nature BBS List	D.Wendling/JS Christianso	Coin of the Realm	(301)585-6697		
Ham/Amateur Radio BBS	Stan Staten	3WINKs BBS	(301)590-9629		
Handicapped Issues BBS	Richard Barth	HEX BBS	(301)593-7357		
Desktop Publishing BBS	Frank Atlee	Infinite Perspective	(301)924-0398		
Delaware AC 302	Vince Boehm/Dave Osburn	Talk Radio BBS	(302)429-7667		
Colorado AC 303/719	Willis Morrow	Big Boy's BBS	(303)458-3832		
Cave Exploration BBSs	Douglas L. Moore II	The CatEye BBS	(304)592-3390		
South Florida Area 305/407	Eric Thav	Silicon Beach BBS	(305)474-6512		
Southern California	Mike Hefferman	SOCAL Corner	(310)422-7942		
California AC 310	Jim Walton	Illusions BBS	(310)804-3324		
Detroit Area 313	Horst Mann	Tony's Corner	(313)754-1131		
St. Louis AC 314	Beth Brooks	Fire Escape's Dir	(314)741-9505		
ASP BBS Member List	Richard Holler	The RoadHouse BBS	(317)784-2147		
Engineering Related BBS	Arthur Petrzelka	Computer Plumber	(319)337-6723		
Rhode Island Area 401	Mike Labbe	Eagle's Nest	(401)732-5292		
Alberta AC 403	Stephen Decarie	T-8000	(403)246-4487		
Calgary Alberta AC 403	Jeremy Birkett	The Quantum BBS OASIS	(403)252-5119		
Atlanta Area 404	Online Atlanta Society		(404)627-2662 (404)924-8472		
Atlanta Area 404	Rodney Aloia	The INDEX System	(406)273-6399		
Montana Area	Jay Michalik	Valley Light BBS Montana MediaNet	(406)549-6325		
Searchlight BBS Systems	Chad Payne	Infinite Space Onlin	(407)856-0021		
Orlando BBS List AC 407	Lenny Lacuy	BABBA BBS	(408)946-8592		
San Francisco Bay Area	Mark Shapiro	Silver Streak BBS	(410)683-0300		
Baltimore BBS Area 410	Brad Blase Chas Stokes	Zuul's Catacombs	(412)264-9787		
Pittsburgh AC 412 National BBS List	DP McIntire/Beth Spotts	Ameriboard	(412)349-6862		
Miwaukee Area 414	Mark G.	The Castle	(414)327-5085		
North America Nudist List	Patrick O'Brien	Natural Connection	(414)426-2110		
Toledo Ohio Area 419/313	Ryck Zarick	Toledo's TBBS	(419)475-2241		
Arkansas Area 501	Bob Underdown	The Blue & The Grey	(501)444-8420		
Louisville KY and South IN	Tim Arnold	Dance of Shiva BBS	(502)893-6360		
Louisville IVI and South IIV	Till Alliold	Dance of Offiva DDG	(002)000 0000		

BBSLIST TOPIC	AUTHOR/EDITOR	CONTACT BBS	TELEPHONE
Portland Oregon BBS	Lisa Gronke	DawGone Disgusted	(503)297-9145
New Orleans AC 504	Darin Celino	Southern Belle BBS	(504)455-9488
New Mexico Area Code (505)	Dan Kiehl	MDC Computers BBS	(505)434-0258
Apogee/ID/Software Crtns List	Dan Linton	Software Creations	(508)368-7139
PCBoards on Internet	Ruben Melo	ponyXpress BBS	(508)587-7669
Worcester MA AC (508)	Jim Metzler	Miwok Village BBS	(508)754-6512
Corpus Christi	James Cordani	Treasure Island	(512)241-8358
Austin Area BBS List AC 512	John Foster	Camel's Back BBS	(512)243-0077
Selected BBS	Joseph Caplinger & Son	J&J's BBS	(513)236-1229
AC 516 Free Shareware BBS	Harold Stein	Long Island Exchange	(516)271-5303
Area Code 517 - Mid-Michigan	Rick Rosinski/SAMM	Wolverine BBS	(517)695-9952
	Dennis Hauser	Delight The Customer	(517)797-3740
Business/Professional BBS	John Mendivil	Majestic Royalty BBS	(602)278-1651
Phoenix AC (602)	Sue Widemark	Cheese Whiz BBS	(602)279-0793
Phoenix AC (602)		The Commo Shack BBS	(602)452-0587
Cochise County Arizona	Kevin McCrory	Marios Birdhouse	(603)226-0467
New Hampshire BBS's	Mike Maggi		(604)477-5163
Victoria/Vancouver AC 604	Mark Morley	Island Net	(606)271-1451
Kentucky AC (606)	Jon Hagee	Kentucky Explorer	
Wisconsin 608	Jim Wargula	JW-PC Dataflex.HST	(608)837-1923
New Jersey AC 609	Dave Schubert	The Casino BBS	(609)485-2380
New Jersey Area 201/609/908	Wayne R. Morton	Praedo BBS	(609)953-0769
Medical Issues BBS	Edward Del Grosso	Black Bag	(610)454-7396
Minnesota Twin Cities AC 612	Barry Watson	Abiogenetic BBS	(612)774-8454
Apple II BBS	Mike Shecket	Way Out	(614)436-4846
Tennessee AC 615/901	unknown	SPDA Info Service	(615)952-5638
Female Sysops	Brenda Donovan	The Pacific Rim	(619)278-7361
San Diego, CA AC 619	Tom Grigg	ComputorEdge	(619)573-1675
San Diego AC 619	Joe Nicholson	General Alarm	(619)669-0385
Apple II BBS with Internet con	Morgan Davis	pro-sol	(619)670-5379
Virginia AC 703/804	Eddie Gebhard	PC Power House	(703)348-1423
OS/2 BBS Systems	Pete Norloff	OS2/Shareware BBS	(703)385-4325
Geneology Related BBS	Richard A. Pence	NGS-CIG	(703)528-2612
Charlotte, NC AC 704	Blaine Schmidt	Moobasi Optics, Ink	(704)541-9842
Indigenous People BBSs	Arthur McGee	BDPA BAC BBS	(707)552-3314
Black Run/Oriented BBS	Arthur "Rambo" McGee	BDPA BAC BBS	(707)552-3314
Chicago	Peter Anvin	Royal Swedish Viking	(708)491-9036
Gay & Lesbian BBS List	Billy Kennedy	Risqilly BBS	(708)495-6609
Airline Pilot/JUMPSEAT BBSs	Rex Chadwell	ChicAAgo Hangar	(708)980-1613
Houston Area 713	David E. Wachenschwanz	Atomic Cafe BBS	(713)530-8875
Korean BBSs	Wayne Jeong	Korea America Online	(714)449-9373
Rochester NY AC 716	Tracy Logan	Logan's Run	(716)328-2914
RIP BBS Listing	Mario Mueller	Antarctica BBS	(717)755-2440
	Adam Viener	Cyberia	(717)840-1444
717 AC BBS Listing		Computer Ser. of Ver	(802)334-7976
Vermont BBS's	Russ Boyce Bob Chapman	EarthArt BBS	(803)552-4389
Ecology/Conservation BBS		His Board	(805)652-1478
Central California Area 805	Larry Honore	Wildcat! HQ	(805)873-2400
Wildcat! BBS	Jim Harrer	Land's End BBS	(808)499-2527
Oahu Hawaii	Brent Davis		(812)479-1310
Technical Support BBS List	Gary Barr	Digicom BBS	(813)321-0734
Pinellas/Tampa Florida AC 813	Emery Mandel	Mercury Opus	(816)331-4703
Kansas City Area 816/913	Bob Zumbrunnen	PC-HELP BBS	(817)467-1175
Dalls Fort Worth BBS List	Mark Robbins	Second Sanctum	
Occult BBS	Phil Hansford	Mysteria	(818)353-8891
Commodore 64/128/Amiga BBS	John Rigali	Night Gallery	(818)448-8529
Texarkana BBS List	Rodney Payne	Internet Connection	(903)793-7173
Durham Region-Ontario Canada	Shawn Berry	Seventh Dimension	(905)571-6052
Alaska AC 907	Patti Johnson	Alaska Pirate Soc.	(907)248-9364
Travel Related BBSs	Robert Southwick	AK Information Cache	(907)373-3205
Darwin National USBBS List	Bob Breedlove	Bob's BBS	(916)929-7511
OS/2 Related BBS	Dave Fisher	LiveNet 1:170/110	(918)481-5715
Tulsa Oklahoma Area BBS List	Linda Hargraves	ACCESS AMERICA	(918)747-2542
Raleigh NC Area Code 919	Mike Stroud	Micro Message Svc.	(919)779-6674
Republic of South Africa	Henk Wolsink	Catalyst BBS	27-41-34-1122
Switzerland BBS List	Cesar Keller	The Warehouse BBS	41-1-492-5157



Advertise your electronic bulletin board/online information service in Boardwatch Magazine. Let our readers know who you are and what you're doing with online technology. To order a BBS ad in the Boardwatch Classified BBS ad section, call the Boardwatch BBS at (303) 973-4222 and use our online ad entry system. In addition to standard list information, enter up to 255 characters of text describing your online service - all for \$25 per month. Master Card or Visa only.

MicroSellar BBS (201)239-0001 Verona, New Jersey since 03/83. Sysop: Mark Rapp. Using PCBoard 15.2 with 11 lines on MS-DOS 80486 with 5100 MB storage. Hayes at 28800 bps. No fee. PCBoard 15.x alpha site. NJ's preferred BBS for the professional 11 yrs running. HiSpeed lines for easy access. Gold mine of the best-quality, latest files, games, info. Many mail networks including Internet. Trial access provided. Major credit cards.

Synergy Online (201)331-1797 Parsippany, New Jersey since 07/93. Sysop: Jim Boxmeyer. Using PCBoard 15.1 with 30 lines on MS-DOS 80486 with 15000 MB storage. Cardinal at 38400 bps. No fee. 20,000+ recent shareware files. 4,000+ conferences. Internet, Usenet, RIME, U'NI-net, Intelec and other networks online. Huge adult areas with over 10,000 GIFs. Daily weather, newspapers, magazines online. 30 Public lines available.

Coyote Junction BBS (201)335-4885 Towaco, New Jersey since 06/94. Sysop: Joe AScione. Using WildCat 3.9 with 1 line on MS-DOS with 210 MB storage. Hayes at 14400 bps. No fee. Presenting the best from the Southwest and Native America. Online shopping doors for all your Southwestern and Native American needs. Experience our book store music shop, chile shop and gourmet coffee shop. Many new items being added each day.

Central Core BBS (201)575-8991 Montville, New Jersey since 01/85. Sysop: Mike Cocke. Using PCBoard 15.1 with 3 lines on MS-DOS with 3500 MB storage. ZyXel at 19200 bps. No fee. A BBS for grownups of all ages. Free Internet trial access. Member of ILink and BASNet echomail networks. Upload credits for messaging. Online national weather reports. Scrabble & trivia tournaments. Many technical interest files. No porn.

Chat Chalet (201)791-8850 Saddle Brook, New Jersey since 04/91. Sysop: Ronnie Meier. Using MajorBBS 6.12 with 24 lines on MS-DOS 80486 with 877 MB storage. Practical at 14400 bps. \$10.00 Monthly fee. Where New Friends Meet (We get over 700 calls each day). Send us your picture we will make you a GIF (free).

The Garden of Eden BBS (201)839-5401 Ringwood, New Jersey since 11/92. Sysop: Frank Molino. Using WildCat 3.9 with 3 lines on MS-DOS with 800 MB storage. US Robotics at 14400 bps. \$50 Annual fee. 18 CDs online with over 95,000 files including adult gifs. New inhouse scans added weekly. Adultlinks & Fidonet Conferences. Charge cards accepted for instant access (Visa MC Amex) Over 90 online doors & Games Adultlinks, Fidonet, Doornet. Don't miss it

BEACON STUDIOS BBS (201)863-5253 Union City, New Jersey since 01/93. Sysop: Conrad & Scott. Using Major BBS 6.11 with 15 lines on MS-DOS 80486 with 15090 MB storage. Supra to 14400 bps. \$.50 Hourly fee. Free downloads for new users with 60 min. allowed daily. Over 70,000 files on 14CD's. Two national chat hookups every night. WorldLink and ChatLink. InterNet e-mail Usenet, FidoNet, MajorNet, WorldNet and ChatNet. Games.

Jezebel's Parlour BBS (201)927-2932 Flanders, New Jersey since 04/92. Sysop: Beverly Delisa. Using TBBS 2.2 with 12 lines on MSDOS with 3720 MB storage. US Robotics at 19200 bps. \$50 Annual fee. Over 7 gigabytes of files, including adult graphics. New in-house scanned GIF files added each week. Online games and databases, user to user chat, conference areas, and adult matchmaking. The BBS with the feminine touch.

The Starship][BBS (201)935-1485 Rutherford, New Jersey since 07/80. Sysop: Philip J. Buonomo. Using TBBS 2.2 with 32 lines on MS-DOS with 10000 MB storage. V.32bis at 14400 bps. No fee. Operating for 14+ years, Starship is one of the longest running, most successful bbs systems ever. Free public access, adult & non-adult topics, chat, files, games, & databases. USR, Hayes, Telebit, v.32bis 19.2 kbps modems online, full internet access.

CyberQuest (206)343-5688 Seattle, Washington since 11/93. Sysop: Scott Brown. Using TBBS 2.2 with 18 lines on MS-DOS with 10000 MB storage. Hayes at 28800 bps. \$.25 Hourly fee. Full internet access, home of Seattle After-Dark. Telnet to cyberquest.com. Extensive shareware, files, news via satellite. Active & friendly chat areas. Multi-player games, Connex, newsgroups, FidoNet. Flexible rates, free trial. All credit cards.

FutureLink OIS (206)813-8778 Kent, Washington since 01/94. Sysop: Sheree Graham. Using WildCat 3.9M with 1 line on MS-DOS with 20 MB storage. Hayes at 19200 bps. No fee. We are for the whole family. Internet's Usenet, email, games, PC-Catalog, FL-Gazette, CD-ROMs (organized), free 1 week preview. Shopping mall, register online, our customer service is excellent. Nice RIP support. Free gift with purchase of complete.

Exxxtacy Adult BBS (209)962-4045 Pine Mt. Lake, California since 06/86. Sysop: Victoria Cummings. Using MajorBBS 6.12 with 4 lines on MS-DOS with 10000 MB storage. US Robotics at 14400 bps. \$25 Annual fee. Large hi-rez adult file collection with thousands of erotic files. New member bonus - adult burlesque video tape of our California coeds with each membership. Also feature chat, online games, and more. Visa and Mastercard accepted online.

The Invention Factory BBS (212)274-8110 New York City, New York since 03/84. Sysop: Michael Sussell. Using PCBoard 15.1 with 48 lines on MS-DOS with 99999 MB storage. US Robotics at 28800 bps. \$15 Monthly fee. New York's best BBS. Free downloads for new users. More than 14 gig of shareware and freeware. Internet, Usenet, e-mail. Large adult files area. MC Visa Amex.

Midnight Driver Data Super Highway (212)750-3643 New York City, New York since 07/93. Sysop: Dave Lew. Using PCBoard 15.1 with 4 lines on MS-DOS with 3000 MB storage. Hayes at 28800 bps. \$59.95 Annual fee. Free Internet mail and Usenet news. Over 866 Usenet newsgroups and increasing every day. 2 CD-ROMs with tons of shareware. Lots of games including the latest Apogee wares. The best buy around. Come cruise by and see what all the excitement is about.

Midnight Driver Data Super Highway (212)750-3643 New York City, New York since 07/93. Sysop: Dave Lew. Using PCBoard 15.1 with 4 lines on MS-DOS with 3000 MB storage. Hayes at 28800 bps. \$59.95 Annual fee. Free Internet mail and Usenet news. Over 800 Usenet newsgroups and increasing every day. 2 CD-ROMs with tons of shareware. Lots of games including the latest Apogee wares. The best buy around. Come cruise by and see what all the excitement is about.

icroSellar BBS (201)239-0001 Verona, New Jersey since 03/83. Sysop: Mark Rapp. Using PCBoard 15.2 with 11 lines on MS-DOS 80486 with 5100 MB storage. Hayes at 28800 bps. No fee. PCBoard 15.x alpha site. NJ's preferred BBS for the professional 11 yrs running. HiSpeed lines for easy access. Gold mine of the best-quality, latest files, games, info. Many mail networks including Internet. Trial access provided. Major credit cards.

Synergy Online (201)331-1797 Parsippany, New Jersey since 07/93. Sysop: Jim Boxmeyer. Using PCBoard 15.1 with 30 lines on MS-DOS 80486 with 15000 MB storage. Cardinal at 38400 bps. No fee. 20,000+ recent shareware files. 4,000+ conferences. Internet, Usenet, RIME, U'NI-net, Intelec and other networks online. Huge adult areas with over 10,000 GIFs. Daily weather, newspapers, magazines online. 30 Public lines available.

Coyote Junction BBS (201)335-4885 Towaco, New Jersey since 06/94. Sysop: Joe AScione. Using WildCat 3.9 with 1 line on MS-DOS with 210 MB storage. Hayes at 14400 bps. No fee. Presenting the best from the Southwest and Native America. Online shopping doors for all your Southwestern and Natine American needs. Experience our book storemMusic shop, chile shop and gourmet coffee shop. Many new items being added each day.

Central Core BBS (201)575-8991 Montville, New Jersey since 01/85. Sysop: Mike Cocke. Using PCBoard 15.1 with 3 lines on MS-DOS with 3500 MB storage. ZyXel at 19200 bps. No fee. A BBS for grownups of all ages. Free Internet trial access. Member of ILink and BASNet echomail networks. Upload credits for messaging. Online national weather reports. Scrabble & trivia tournaments. Many technical interest files. No porn.

Chat Chalet (201)791-8850 Saddle Brook, New Jersey since 04/91. Sysop: Ronnie Meier. Using MajorBBS 6.12 with 24 lines on MS-DOS 80486 with 877 MB storage. Practical at 14400 bps. \$10.00 Monthly fee. "Where New Friends Meet" (We get over 700 calls each day) Send us your picture we will make you a GIF (FREE)

Digital Universe Online 513-860-1191 Free Access For Sysops Cincinnati IconUpDater - The Best icon scanner/updater available. The World of BOB - A totally RIPPED out mulit-line, role playing, adventure game for all to enjoy. Icon animation & Multi-Player. A must for BBSes. - ... and 6 other great programs with full RIP supoport. Call for DEMOs and Demo Keys. Immediate Online Registration with Visa & MC. Call Ryan Andersen at 513-860-9669 (voice) for more info. ${f ASWareTechnologies}$ Custom RIP screens available

Don't Miss the RIP. Call with RIPterm

The Garden of Eden BBS (201)839-5401 Ringwood, New Jersey since 11/92. Sysop: Frank Molino. Using WildCat 3.9 with 3 lines on MS-DOS with 800 MB storage. US Robotics at 14400 bps. \$50 Annual fee. 18 CDs online with over 95,000 files including adult gifs. New inhouse scans added weekly. Adultlinks & Fidonet Conferences. Charge cards accepted for instant access (Visa MC Amex) Over 90 online doors & Games Adultlinks, Fidonet, Doornet. Don't miss if

BEACON STUDIOS BBS (201)863-5253 Union City, New Jersey since 01/93. Sysop: Conrad & Scott. Using Major BBS 6.11 with 15 lines on MS-DOS 80486 with 15090 MB storage. Supra at 14400 bps. \$.50 Hourly fee. Free downloads for new users with 60 min. allowed daily. Over 70,000 files on 14CD's. Two National Chat hookups every night. WorldLink and ChatLink. InterNet E-Mail UseNet, FidoNet, MajorNet, WorldNet and ChatNet. Games.

Jezebel's Parlour BBS (201)927-2932 Flanders, New Jersey since 04/92. Sysop: Beverly Delisa. Using TBBS 2.2 with 12 lines on MSDOS with 3720 MB storage. US Robotics at 19200 bps. \$50 Annual fee. Over 7 gigabytes of files, including adult graphics. New in-house scanned GIF files added each week. Online games and databases, user to user chat, conference areas, and adult matchmaking. The BBS with the feminine touch.

The Starship | BBS (201)935-1485 Rutherford, New Jersey since 07/80. Sysop: Philip J. Buonomo. Using TBBS 2.3 with 32 lines on MS-DOS 80486 with 10000 MB storage. All v.32bis Supportd at 19200 bps. \$\$0-75 No fee req fee. Operating for 14+ years, Starship is one of the longest running, most successful bbs systems EVER! FREE public access, Adult & non-adult topics, chat, files, games, & databases. USR, Hayes, Telebit, v.32bis 19.2 kbaud modems online, full internet access!

CyberQuest (206)343-5688 Seattle, Washington since 11/93. Sysop: Scott Brown. Using TBBS 2.2 with 18 lines on MS-DOS with 10000 MB storage. Hayes at 28800 bps. \$.25 Hourly fee. Full internet access, home of Seattle After-Dark. Telnet to cyberquest.com. Extensive shareware, files, news via satellite. Active & friendly chat areas. Multi-player games, Connex, newsgroups, FidoNet. Flexible rates, free trial. All credit cards.

Fantasy Jand CD-Rom/Multi-media/Adult \$30 Nightowls 12 Software Vault Platinum \$22 Software Vault Emerald \$24 \$45 7th Guest \$62 Ultima VIII: Pagan on CD * Digital Dreams I or II \$25 * Windows 1994 \$31 * Women on Wheels \$31 * T & A to the Maxx \$18 *Fao Gold 1, 2 or 3 \$29 * Barlow Affairs (Interactive) \$34 * Nova Adult Set 1, 2 and 3 \$19 * Busty Babes 2 \$29 \$30 Pier 4 QModemPro for Windows \$83 \$49 Best of Perfect Vision CD Voice 217-566-3723 **Fantasy Land** PO Box 320 Fax 217-698-0940 BBS 217-698-0335 Williamsville, IL 62693 * Adult CD's - MUST be Over 21 MC/VISA/CHECK/MO/COD CD-Rom/Multi-Media

FutureLink OIS (206)813-8778 Kent, Washington since 01/94. Sysop: Sheree Graham. Using WildCat 3.9M with 1 line on MS-DOS with 20 MB storage. Hayes at 19200 bps. No fee. We are for the whole family, Internet's Usenet, E-Mail, games, PC-Catalog, FL-Gazette, CD-ROMs (organized), free 1 week preview. Shopping mall, register online, our customer service is excellent. Nice RIP support. Free gift with purchase of complete.

Exxxtacy Adult BBS (209)962-4045 Pine Mt. Lake, California since 06/86. Sysop: Victoria Cummings. Using MajorBBS 6.12 with 4 lines on MS-DOS with 10000 MB storage. US Robotics at 14400 bps. \$25 Annual fee. Large Hi-Rez Adult File collection with thousands of erotic files. New member bonus - Adult Burlesque Video Tape of our California Coeds with each membership. Also feature chat, online games, and more. Visa and Mastercard accepted online.

The Invention Factory BBS (212)274-8110 New York City, NY since 03/84. Sysop: Michael Sussell. Using PCBoard 15.1 with 48 lines on MS-DOS/NOVELL-3.11 with 99999 MB storage. US Robotics at 28800 bps. \$15 Monthly fee. New York's best BBS! Free downloads for new users. More than 14 gig of shareware and freeware. Internet/Usenet E-mail. Large adult files area. Master/Visa/Amex.

Midnight Driver Data Super Highway (212)750-3643 New York City since 07/93. Sysop: Dave Lew. Using PCBoard 15.1 with 4 lines on MS-DOS 80486 with 3000 MB storage. Hayes at 28800 bps. \$59.95 Annual fee. Free Internet mail and Usenet news. Over 866 Usenet newsgroups and increasing every day. 2 CD-ROMs with tons of Shareware. Lots of games including the latest Apogee wares. The best buy around. Come cruise by and see what all the excitement is about.

Midnight Driver Data Super Highway (212)750-3643 New York City, New York since 07/93. Sysop: Dave Lew. Using PCBoard 15.1 with 4 lines on MS-DOS 80486 with 3000 MB storage. Hayes at 28800 bps. \$59.95 Annual fee. Free Internet mail and Usenet news. Over 800 Usenet newsgroups and increasing every day. 2 CD-ROMs with tons of shareware. Lots of games including the latest Apogee wares. The best buy around. Come cruise by and see what all the excitement is about.



The Liberty BBS (213)732-2300 Los Angeles, California since 07/92. Sysop: John Galt. Using MajorBBS 6.12 with 134 lines on MS-DOS 80486 with 5420 MB storage. US Robotics at 2400 bps. \$10 Monthly fee. Local to callers from 8 California area codes. Nationwide ChatLink, WorldLink, MailLink, MajorNet, Internet & Usenet newsgroups. Use your modem to call 800-474-1818 for local & low cost nationwide SprintNet access information. Chat, games, news & more.

BCS BBS (213)962-2902 Los Angeles, California since 03/92. Sysop: Jim Lee. Using WildCat 3.90P with 6 lines on MS-DOS 80486 with 2500 MB storage. US Robotics at 14400 bps. \$52 Annual fee. Los Angeles' premium BBS. Full subscription. ILink, Cal-Link & Internet, Usenet. Quality files only. New services regularly added. All major credit cards. 6 high speed lines and growing rapidly.

The Anarchist's BBS (214)289-8328 Dallas, Texas since 06/93. Sysop: Alan Bradshaw. Using MajorBBS 6.2 with 12 lines on MS-DOS with 2500 MB storage. US Robotics at 28800 bps. No fee. Categories include: bombs, computer hacking, drugs, fake ID, firearms, fraud and con games, investigative techniques, locksmithing, phone phreaking, political, revenge, sex, surveillance, and survival. Encrypted email. No ID verification.

Fantasy Football Information Exchange (214)642-9559 Grand Prairie, Texas since 06/92. Sysop: Edward Girard. Using Synchronet 2.0 with 3 lines on MS-DOS with 420 MB storage. Supra at 28800 bps. \$19.95 Annual fee. Dedicated to Fantasy Football league enthusiasts as a centralized forum to netwok information. Membership includes: stats, boxscores, injury reports, games, FF shareware, Draft Day info, predictions, player ratings, and more. Accept Visa MC. Call us.

The Magic Bus (215)628-2646 Ambler, Pennsylvania since 06/93. Sysop: Matt Payne. Using MajorBBS 6.2 with 32 lines on MS-DOS with 1050 MB storage. Hayes at 28800 bps. No fee. Philadelphia's fastest growing BBS. 32 lines up to 28.8. Online multi-player MUD games, nation-chat, world-wide mail transfers, 6 CD-ROM's online, matchmaker, RIP support, and much, much more.

The Anterra Network (215)675-3851 Hatboro, Pennsylvania since 03/90. Sysop: Steve Ferguson. Using WildCat 3.9 with 5 lines on MSDOS 80486 with 10800 MB storage. US Robotics at 16.8 bps. \$5 Monthly fee. Philadelphia area's largest BBS. Over 53,000 files and 700 message conferences from FidoNet, WildNet, ThrobNet, AdultNet, ElNet, and RimeNet. The best game of Trade Wars in the 215 area code.

The Round Table (215)678-0818 Reading, Pennsylvania since 03/90. Sysop: Dan MCCoy. Using PCBoard 14.5a with 7 lines on MS-DOS 80386 with 2500 MB storage. US Robotics at 14400 bps. \$20 Annual fee. Free two week access for all. Engineering & AutoCad specialty system. 50,000+ files technical, Windows, DOS util & more. 400+ qigs on 6 networks. USA Today, games, & news. Member USN and ASP.

ONIX (215)879-6616 Philadelphia, Pennsylvania since 04/87. Sysop: Jeff N. Miller. Using MajorBBS 6.12 with 22 lines on MS-DOS 80486 with 2550 MB storage. US Robotics at 28800 bps. \$15 Monthly fee. Philadelphia's friendliest BBS. 38 multi-player games. Files for IBM, Amiga, MAC, Windows. Local & national chat lines. Internet, Usenet, Majornet, Worldlink. RIP support. 30 days free for new members. King of Prussia: (610)992-1720

32 Bit Bus BBS (215)949-2701 Levittown, Pennsylvania since 10/90. Sysop: Bob Bernstein. Using PCBoard 15.2 with 4 lines on MSDOS with 4000 MB storage. US Robotics at 14400 bps. \$15-45 Annual fee. Extensive file areas for Flight Simulations, GIF files, desktop pub & Windows. Mail networks include: Internet Usenet, RIME, Fido, SimNet, FS Fan, Flynet. Fileareas for EPIC Megagames and Apogee Software. Subscribe via Billing. 30 days free access.

PC-Ohio PCBoard (216)381-3320 Cleveland, Ohio since 09/85. Sysop: Norm Henke. Using PCBoard 15.1 with 50 lines on MS-DOS with 15000 MB storage. US Robotics at 14400 bps. \$52 Annual fee. Planet Connect satellite connection. 22 Email networks including the Internet as pcohio.com. 100,000 files, 250 game doors, 5000 conferences. Hayes V.FC 28800 modems at 216-691-3030.

Homes OnLine, Inc (216)562-4006 Cleveland, Ohio since 06/94. Sysop: Paul Moon. Using MajorBBS 6.12 with 2 lines on MS-DOS with 250 MB storage. US Robotics at 14400 bps. No fee. Searchable database of real estate for sale with online color photos. Advertising is open to the public & agents. We do all the scanning & data input for you. Call 1-800-896-9002 (voice) for advertising info.

Fantasy Land BBS (217)698-0335 Springfield, Illinois since 12/91. Sysop: Steve Horrighs, Jr. Using PCBoard 15.1 with 4 lines on MS-DOS with 10000 MB storage. US Robotics at 28800 bps. \$30 Annual fee. Simply the best. 5+ Megs added daily. Lots of doors. Thousands of message echos from more than 9 national mail networks w/ 3 adults only networks. 1/3 of files online are adult related. Fast online instant upgrades with VISA, MC. Download on first call.

ComChat Online Services (218)847-8340 Detroit Lakes, Minnesota since 11/93. Sysop: David W. Johnston. Using MajorBBS 6.2 with 60 lines on MS-DOS with 210 MB storage. Hayes at 14400 bps. \$7.50 Monthly fee. Internet, Galactic Empire, chat, files. Your link to the world. For information: email sysop@comchat.com; call our voice line 218-847-4980, or AutoNet Client Support 1-800-521-2733 for local access numbers. When accessed type C COMCHAT see ya online.

Asia Club (301)203-0281 Washington, DC since 03/94. Sysop: Alex Clarke. Using MajorBBS 6.21 with 4 lines on MS-DOS with 800 MB storage. Supra at 14400 bps. \$.50 Hourly fee. Featuring an exclusive penpal filebase of beautiful Asian ladies desiring American men for correspondence, friendship or romance. GIF photos and bio-data. Call for Instant Access. Also: Chat, Games, Adult Files.

Astronomy Classifieds - Online (303)294-0239 Denver, Colorado since 07/94. Sysop: Dave Kaufmann. Using MajorBBS 6.21 with 1 line on MS-DOS with 30 MB storage. Hayes at 14400 bps. No fee. Place or read classified ads for use astronomy equipment. Classifications include, telescopes, eyepieces, ccd equipment, and more. Prices are typically excellent bargains. Access to this BBS is free.







The Digital Inn (303)296-1300 Denver, Colorado since 03/94. Sysop: Steve Adams. Using TBBS 2.2 with 10 lines on MS-DOS with 17000 MB storage. Intel at 14400 bps. \$10 Monthly fee. 18 CD ROM's online, satellite Internet/Usenet News Groups, Fido Echo Areas, Internet Email. USA Today, Boardwatch. Great message areas, Ultrachat, games. FREE OPEN HOUSE! Type "open" as access ID during registration. Home of HotelNet online H&R services.

DLS InfoNet (303)347-2921 Littleton, Colorado since 11/92. Sysop: Jerry McCarthy. Using WildCat 3.91IM with 5 lines on MS-DOS with 8300 MB storage. Supra at 14400 bps. \$14.95 Annual fee. User friendly with the personal touch. Large file database, 110 file areas, well maintained. Extensive Windows area. No upload, download ratios. Internet e-mail & 120 newsgroups. RIP graphics. USA Today. Time Bank Door. Free trial period. Give us a call.

Colorado Connection (303)423-9775 Arvada, Colorado since 12/90. Sysop: Terry Rune. Using TBBS 2.2 with 5 lines on MS-DOS 80386 with 800 MB storage. US Robotics at 14400 bps. \$60 Annual fee. 16 CD-ROMs online, games, Internet, FidoNet, EchoNet, Home of the Bird Info Network, BirdNet, game contests, all RIP system. Over 32,000 messages online, Boardwatch Magazine, Colorado Weatherline, VISA/MC online. Visit us today.

The File Bank, Inc (303)534-4646 Denver, Colorado since 01/93. Sysop: Bartee Westerberg. Using TBBS 2.2 with 22 lines on MS-DOS with 21000 MB storage. Hayes at 28800 bps. \$10 Monthly fee. ASP approved BBS & one of the finest collections of IBM compatible shareware. Many free download areas including extensive libraries of astronomy software & data files. Message areas, online games, chat. VISA, MC, AMEX, Discover Welcome. Voice: 534-4538.

Wood's Works (303)766-4915 Aurora, Colorado since 08/94. Sysop: Hugh Munoz. Using RoboBoard 1.04 with 4 lines on MS-DOS with 1800 MB storage. PPI at 14400 bps. \$15 Quarterly fee. Grpahics BBS with ANSI support. Free terminal, works with any BBS. 20 years experience in home repair. Home repair tips, contractor referral area, crafts, yard, garden, games, shareware, chat, mail. Small fee for home repair and other 'do it yourself'.

Rite-Way Online Service (305)931-7136 Miami, Florida since 03/94. Sysop: Tom Johnson. Using MajorBBS 6.21 with 12 lines on MS-DOS with 2000 MB storage. US Robotics at 28800 bps. No fee. Full color photograph databases for real-estate, automobiles, dating and boats. Majornet, national chat 24hrs, RIP games, 4 user DOOM, free access. And much much more.

The LINK BBS (310)459-1264 Los Angeles, California since 09/93. Sysop: Samuel Koh. Using WildCat 3.91M with 4 lines on MS-DOS 80486 with 8000 MB storage. Hayes at 28800 bps. No fee. FREE Access to Internet! Free membership to California's BEST System! We have it all! News, Stocks, Weather, Magazines, Business, Hobbies, Computers, & Shopping. Local Access to (213)-(818)-(310) Areacodes. Call Today and LINK to the Future today!

BBS Guide Online Database (310)477-0408 Los Angeles, California since 03/94. Sysop: Tom Hamilton. Using MajorBBS 6.0 with 32 lines on MS-DOS with 500 MB storage. Other at 14400 bps. \$0.33 search fee. Why waste phone\$ random dialing unknown BBSs. Pinpoint the right free/fee BBS for you. Search w/ ANY combo of category keyword technical details network affiliation. Type [tbgb] at logon for ID & passwrd. Free disk version also.

THUNDERBOLT! (312)248-4822 Chicago, Illinois since 02/91. Sysop: Zeus. Using MajorBBS 6.21d with 10 lines on MS-DOS 80386 with 16000 MB storage. US Robotics at 14400 bps. 10 variable fee. "Where the GODS come to play.." mythology-themed BBS! MajorNet, NetAccess netmail, ChatLink, InterLink, Interactive Games, Oracles, Online News/Magazines, RIP Graphics, INTERNET access & MORE! FREE demo access. Rates low as \$0.01/hr. Family rates, too!

Didrickson for Comptroller '94 (312)444-9423 Chicago, Illinois since 07/94. Sysop: Tom Hendricks. Using WildCat 3 with 1 line on MS-DOS with 200 MB storage. Hayes at 2400 bps. No fee. Adding lines as needed. Supports Loleta Didrickson's campaign for State Comptroller of Illinois. Candidate bios, position papers, reprts on her experience and accomplishments. Conducts surveys online and provides several forums.

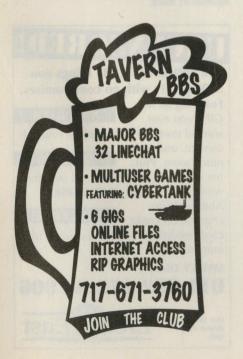
The Corporate Connection BBS (312)792-8292 Chicago, Illinois since 10/93. Sysop: Steve Lange. Using MajorBBS 6.21 with 3 lines on MS-DOS with 1024 MB storage. AT&T Paradyne at 14400 bps. \$35 Annual fee. 2 CD-ROMS Online. Real Estate focused system, authorized reseller of many products with online sales (VISA MC AMEX). Custom Geo-Codeing done, Geo-Coded databases available online. Dialout gateway to other systems, online fax, free limited Internet.

Compu-Erotica (312)902-3599 Chicago, Illinois since 07/84. Sysop: Tiger. Using Custom 5.5 with 32 lines on DEC VAX 3500 with 1500 MB storage. US Robotics at 38400 bps. \$.15 Hourly fee. If you like your chat HOT, you'll LOVE CEBBS! Alternate lifestyle chat-conferences, erotic shopping, active party calendar, unique chat features, internet mail and MORE! Chicago's premier adult BBS with over 500,000 served! Women FREE after v/v. V/MC/D.

HAL 9000 BBS (313)663-4173 Ann Arbor, Michigan since 03/88. Sysop: Victor R. Volkman. Using PCBoard 15.1 with 10 lines on 80486 with 2800 MB storage. Hayes at 28800 bps. \$30 Optional fee. You can use Telnet, Gopher, Archie, Veronica, IRC, and Telnet inbound too. Large SciFi GIF collection. Internet email, Usenet newsgroups from around the world. Special file areas devoted to Star Trek and The Prisoner TV shows and much more.

AdventureSource (313)953-8666 Livonia, Michigan since 06/94. Sysop: Mark Williams. Using MajorBBS 6.2 with 8 lines on MS-DOS 80486 with 1200 MB storage. Supra at 14400 bps. \$50 Annual fee. Dedicated to Kids of any ages. No adult files, supervised. Have your kids dial-up! Thousands of shareware titles - sci-fi, arcade, adventure, educational games. RIP fully supported. Teleconference, E-Mail, and online games. Free trial & free downloads!

Coherent Spectrum BBS (401)435-6759 East Providence, Rhode Island since 06/93. Sysop: Virilman. Using WildCat 4 with 3 lines on MSDOS with 30000 MB storage. Hayes at 19200 bps. \$125 Annual fee. Rl's best BBS featuring HPVAC and adult GIFs, GL'S and text files. Usenet & email. Many online registered door games. Callback verification. Free 1 week trial period after verification. Over 17,000 files and more evryday. Call today.







V.FastSex BBS (404)338-9483 Atlanta, Georgia since 08/15. Sysop: Jason Byrd. Using WildCat 4.0 with 4 lines on MS-DOS with 3600 MB storage. US Robotics at 28800 bps. \$35 Annual fee. 5 hot adult CD's online. 4 V.Fast 28.8 lines. All our pictures are of the highest quality and hard to find. Preview your pictures before you download with WildCat 4's online thumbnail maker. Hottest pics in the Southeast. Call today.

The INDEX System TBBS (404)924-8472 Woodstock, Georgia since 04/83. Sysop: Rodney A. Aloia. Using TBBS 2.2 with 32 lines on MS-DOS 80486 with 5000 MB storage. Hayes at 28800 bps. No fee. This is a BBS for the Serious Modem'er! Internet, FidoNet, Games, Chat, Files Messages, on one of Atlanta's oldest and largest BBS's. Great fun. Local to Athens and LaGrange, GA. Operated by INDEX, the place to buy BBS S/W.

Substation BBS (407)477-5756 Woodbury, New York since 04/86. Sysop: Paul Blaccard. Using PCBoard 15.0 with 4 lines on MS-DOS with 9000 MB storage. US Robotics at 16800 bps. \$30 Annual fee. Dependable quality BBS system. Featuring loads of DOS shareware files with one of the most exciting adult areas. Mentioned in the book More Joy of Cybersex for its innovative adult scans. Voice support (407)477-5755

eVAULT Remote Backup Service (408)255-4883 Cupertino, California since 08/94. Sysop: Bob Zeidman. Using TBBS 2.2 with 1 line on MS-DOS with 100 MB storage. Hayes at 28800 bps. No fee. Protect your data from catastrophic loss. We offer remote backup over the phone automatic, unattended, inexpensive. Schedule critical files for backup at any time using our eBACK software. For registration info and fees call (408)255-4882 (voice).

The Ride (408)399-4515 Los Gatos, California since 06/87. Sysop: Tex. Using MajorBBS 6.21 with 14 lines on MS-DOS 80486 with 30000 MB storage. US Robotics at 14400 bps. \$.50 Hourly fee. The Ride BBS chat system offering systems in both Los Gatos and Sonora, (209)536-1555. The Ride BBS has a full file base system along with most of the popular games. See you online. Adults only.

Nitelog BBS (408)655-1096 Monterey, California since 02/89. Sysop: Karl Van Lear. Using PCBoard 15.1 with 26 lines on MS-DOS with 13300 MB storage. US Robotics at 28800 bps. \$25 Quarterly fee. DOS, Win 3x, OS/2, UNIX, MAC, Amiga and adult files. Internet email, Usenet, RIME, Ilink, Fidonet. National weather maps updated 8 times daily. Online realtime that. All major credit cards accepted. 600 to 700 new files added weekly. RIP interface too.

Garlique Graphics Image Center (408)847-0665 Gilroy, California since 07/91. Sysop: Greg. Using WildCat 4 with 1 line on MS-DOS with 7000 MB storage. US Robotics at 19200 bps. \$.80 per file fee. Home of the world famous Garlique Ladys. Large selection of the highest quality BBS legal adult images. Featuring the hottest California models, some that have been in major adult publications. Lg selection of adult CD's. Excellence on line. Internet

Texas RECON (409)845-2066 College Station, Texas since 08/94. Sysop: Greg Keith. Using MajorBBS 6.2 with 2 lines on MS-DOS with 250 MB storage. Supra at 14400 bps. No fee. Your only source of unbiased Texas real estate data. From Texas A&M University. Catalog with 300 research publications. Trends, news, real estate law updates. How to get a Texas real estate license and more.

HouseNet (410)745-2037 St. Michaels, Maryland since 05/91. Sysop: Gene Hamilton. Using WildCat 3.90 with 4 lines on MS-DOS 80486 with 1080 MB storage. US Robotics at 14400 bps. \$30 Annual fee. The only BBS with expert home repair and remodeling advise and hundreds of files for downloading. 80+ conference areas. ASP, Internet, RIME, FidoNet. Full access on first call, friendly sysops, quarterly newsletter, monthly giveaway, 30 min. free a day.

Cynosure Online (410)781-6271 Eldersburg, Maryland since 01/87. Sysop: Doug Granzow. Using WildCat! 4 with 2 lines on MS-DOS 80486 with 890 MB storage. US Robotics at 14400 bps. \$20 Annual fee. Internet E-Mail, Usenet news, RIP graphics and new features are being added regularly. We have been providing email and Usenet for over three years. Only \$10 year for sysops and students. 14-day free trial available to new callers. Easy to use.

The Liberty BBS (415)325-6781 Palo Alto, California since 07/92. Sysop: John Galt. Using MajorBBS 6.12 with 134 lines on M5-DOS 80486 with 5420 MB storage. US Robotics at 2400 bps. \$10 Monthly fee. Local to callers from 8 California area codes! Nationwide ChatLink, WorldLink, MailLink, MajorNet, Internet & Usenet Newsgroups. Use your modem to call 800-474-1818 for local & low cost SprintNet nationwide access info. Chat, games, news, & much more!

The Baud BBS (415)343-6575 Burlingame, California since 03/94. Sysop: David Henderson. Using PCBoard 15.1 with 2 lines on MS-DOS with 560 MB storage. US Robotics at 14400 bps. No fee. Excalibur node: (415)343-5799. Online games (PCBoard). Thousands of files. News from wire services (Excalibur). Online catalog (Excalibur). Auto ads (Excalibur). Very user friendly. Free download of Excalibur terminal program. RIPscript on PCBoard node.

STUDSNet (415)495-2929 San Francisco, California since 07/87. Sysop: Spuds McKenzie. Using WildCat 3.91 with 24 lines on MS-DOS 80486 with 8000 MB storage. Microcom at 28800 bps. \$10 Monthly fee. STUDSNet Central - The worlds largest exclusively gay computer network. Add value to your system, connect to 50,000+ men and wimmin world-wide. Daily mail transfers, net-wide matchmaker and 50+ forums to choose from.

INTIMATE IMAGES ONLINE (415)598-0898 Redwood City, California since 02/94. Sysop: Fred Austin. Using WildCat 3.60P with 10 lines on MS-DOS 80386 with 1200 MB storage. US Robotics at 16800 bps. \$35 Half Year fee. Specializing in scans of our own original adult photography. Video for Windows Clips from our own original videos. Home of the Women of PBG. Custom adult image production services available for your BBS. No recycled magazine scans!

The Travel Connection! (415)691-0954 Mt. View, California since 01/94. Sysop: George Ouzts. Using WildCat 3.9 with 1 line on MS-DOS 80486 with 500 MB storage. Multitech at 14400 bps. No fee. Travel news and information; travel partners; several online travel databases including Bed & Breakfasts; travel photo library; post, download postcards; share travel experiences; travel advisories, warnings; tourist information; more.

Technical Shareware

World's most extensive technical shareware collections, updated bi-monthly, with support for ALL BBSes and the most extensive database directories in the business. CD-ROM and diskette collections for BBSes specializing in Netware, AutoCAD, ASM, C/C++, TPascal, Visual Basic, VBDOS/QB/PDS, Paradox, Clipper, FoxPro, Spreadsheets, OS/2, ObjectVision, MS-Access, Small Business, Science/Engineering, TrueType, or many others. 156,000 record database and door of all PC products and companies. 30 day money-back guarantee since 1984. From \$25. Free brochure.

EMS Professional Shareware 4505 Buckhurst Ct. Olney, MD 20832 Voice:301-924-3594 Fax:301-963-2708 EMail:eengelmann@worldbank.org



(602) 553-8771 fax

UNCENSORED The hottest adult BBS brings you XXX quality with no compromises. Featuring all the XXX GIF'S! GIF's you ever wanted (over 10 GB), loads of original content, and more, HOT CHAT! much more. Plus: hot chat with people from all over the world. And best of all: IT'S FREE! Absolutely no ALL FREE! charges, no credit card needed, just dial and download immediately. SIMPLY DIAL: 011 852 172 94 906 Over 18's only, long distance charges Erotica East

ComputerLink Online Incorporated (416)233-5410 Toronto, Ontario since 05/92. Sysop: Bill Campbell. Using MajorBBS 6.21 with 66 lines on Pentium Network with 15000 MB storage. US Robotics at 19200 bps. \$8.90 Monthly fee. Canada's largest graphical BBS.Featuring over 120,000 files with unlimited downloading,new files daily via satellite feed, Internet and Majornet, Tradewars 2002, adult files, online conversation, FREE new user seminars, Free trial memberships. Voice:233-7150

BAUDEVILLE BBS (416)283-0114 Toronto, ON, Canada since 03/92. Sysop: Ian Evans. Using PCBoard 15.1 with 2 lines on OS/2 80486 with 2000 MB storage. US Robotics at 14400 bps. \$48 Annual fee. 2300+ USENET areas, RIME, Intelec, Nanet, C2C, Racenet, ILink, Medianet, Fidonet. File collection includes 400MB+ of OS/2. The Economical Email Emporium. \$48 membership gets you \$185 in hw/sw coupons! Send email to info@bville.gts.org for more details.

Online Sports (416)928-3339 Toronto, Canada since 06/93. Sysop: Peter Fuller. Using Synchronet 2.0 with 2 lines on MS-DOS with 1000 MB storage. US Robotics at 14400 bps. \$5 Monthly fee. Online Sports is dedicated to all sport's fans. You will find stats, boxscores and the latest injury reports for all major leagues. Join an Online Fantasy League or read our live 24 hour sport's feed via satellite. Fido, Usenet, GamblersNet and more.

The U.S.A. BBS (501)753-8575 Little Rock, Arkansas since 02/93. Sysop: Jeff Johnson. Using TBBS 2.2 with 16 lines on MS-DOS 80486 with 10200 MB storage. AT&T at 19200 bps. No fee. Most popular computers supported. DOS, Windows, & OS/2 files. Many games. One ofthe largest collections of Adult GIFS as well as scenic GIFS. Large adult area. Also many other sections including Religion, Kids, Business. Contests with v32bis modems

FireHawk Online Services (503)296-9834 The Dalles, Oregon since 05/91. Sysop: Cliff Emberg. Using SpitFire 3.5 with 8 lines on MS-DOS with 3500 MB storage. Microcom at 28800 ps. \$50 Annual fee. 2 week demo period. Featuring both The NightLife BBS & NightFire Adult BBS. Beautiful ansi & the best RIP in the NW. Games, messages (8 mail networks & growing), files, chat & fun. Friendly sysops, custom programming, graphics & more for everyone.

Gonga Games BBS (503)924-1057 Albany, Oregon since 03/94. Sysop: Dan LaFollette. Using Synchronet 2.0 with 8 lines on MS-DOS with 450 MB storage. Supra at 14400 bps. \$5 Monthly fee. Gonga Games BBS is deticated to game lovers, with real time online games like The Beasts Domain. 3 CD-ROMs with thousands of IBM and Amiga files. DOVENET, and chat. New stuff continually being added. This is a fun place to hang out, so come on down.

RAZORBILL SYSTEMS (508)448-9337 Groton, Massachusetts since 06/94. Sysop: Michael Lyman. Using FirstClass 2.51 with 2 lines on MACINTOSH with 1400 MB storage. Hayes at 28800 bps. \$5 Monthly fee. Easy, supportive environment for first time modem/computer users. Point and Click Windows and Mac interface, Online Help, Internet and OneNet mail and news,outdoor enthusiasts' area(skiing,snow-boarding,The Bike Shop)FREE ACCESS TO BIRDING RESOURCES!!

Creative Media Productions (508)478-9200 Hopedale, Massachusetts since 09/93. Sysop: Jay Appell. Using PCBoard 15.1 with 2 lines on WINDOWS with 3200 MB storage. Motorola Codex VFAST at 24.4 bps. \$10.00 Quarterly fee. Automobiles, Business, Finance, Comm, Education, Police, Fire, Games, Geneology, Graphics, Health, Medical, Hobbies, Home & Real Estate, Scanners and Shortwave, Doom, Multimedia, Trial 30 free files @ 1HR per day. Computer consultation available online!

The Adult Hangout BBS (508)746-6010 Plymouth, Massachusetts since 04/92. Sysop: Winger. Using MajorBBS 6.2 with 24 lines on MS-DOS with 12500 MB storage. US Robotics at 19200 bps. No fee. A BBS devoted to adults. With over 45,000 adult files online. Matchmaking, chat, adult games, national NetMail, adult flowershop, adult service's directory, adult classified ads, 8-24 CD-ROMs, RIP, all info confidential & women get free access.

ADULT-RANGER BBS (508)756-6133 Worcester, Massachusetts since 11/93. Sysop: Stephen Hopkins. Using WildCat 4 with 4 lines on MS-DOS with 2500 MB storage. Zoom at 14400 bps. \$65 Annual fee. The fastest growing adult board in the Northeast. Adult live chat, 61 conferences including Talk Dirty To Me. Onboard psychologist, computer store, tech specialists. Thousands of GIFs from tame to bizarre, games. 5 sysops. Free ten day trial.

Tiger Team Buddhist Information Network (510)268-0102 Berkeley, California since 06/92. Sysop: Jeff Macko. Using WildCat 4 with 6 lines on MS-DOS with 2000 MB storage. Intel at 14400 bps. \$35 Annual fee. America's Buddhist Online Service. Buddhist conferences, texts, translations, GIF artwork, programs and national event listings. BodhiNet & Usenet conferences, Internet e-mail. Connect with Buddhist Masters, monks/nuns, scholars and lay practitioners.

America's Suggestion Box (ASB) (516)471-8625 Ronkonkoma, New York since 02/92. Sysop: Joe Jerszynski, Using TBBS 2.2 with 16 lines on MS-DOS with 13000 MB storage. PPI at 14400 bps. \$25 Quarterly fee. 110000+ files, ASP approved, Shareware Showcase, Boardwatch, USAToday, Internet E-mail, Usenet. Full Internet Access. Local Access in Nassau and Suffolk.

Alternative Insights (516)676-0741 Glen Head, Long Island, New York since 03/94. Sysop: Celia Varga. Using PCBoard 15.1 with 3 lines on MS-DOS with 700 MB storage. Supra at 28800 bps. \$60 Annual fee. New Age & Science-Ephemerides, atlas, weather, skywatch, online magazines, birthinfo database, FidoNet, PODNet, RelayNet, Usenet Newsgroups, chat, files, doors, New Users, first month FREE access! Entertainment & Enlightenment. Give us a call!

The Silicon Garden BBS (516)736-6662 Coram, New York since 10/89. Sysop: John Woodstock. Using PCBoard 15.1 with 5 lines on MS-DOS with 9000 MB storage. US Robotics at 28800 bps. \$20 Quarterly fee. Internet email @woodybbs.com. Over 3000 Usenet newsgroups included in 6000 total conferences from over 30+echo networks. Over 10.5 million messages a year. 20000+fFiles online. Several online games. Home of AR-Net. One of NY's fastest growing Online sys.

Hi-Teck's Place (516)757-0210 Long Island, New York since 07/91. Sysop: Hi-Teck Pete. Using PCBoard 15.0 with 16 lines on MS-DOS with 23000 MB storage. US Robotics at 19200 bps. \$40 Annual fee. BBS for graphics scans and shareware. Over 80,000 quality GIF & hicolor scans online, also DOS, Windows & adult files. Credit membership online. One of the largest BBS in the northeast. Internet access. Telnet htp.com. Connect and teck us out for free.

Blowout!

STB 4-COM highly configurable! \$103 14.4 Fax Modern with 16550 UART \$85

426meg IDE HardDrive \$219

NE2000 Compat. Ethernet Card - Software
Config. Great for Lantastic 6.0 or Novell. has
coax AND Twisted Pair ports. High IRQs!!!

DoubleSpeed CDROM w/ interface \$137

Lantastic 6.0 2 user Starter Kit (save \$60 by using our fully compatible interface cards) \$315 /

Lantastic 6.0 5 Node Software \$335

AMD DX2/66 VLB Motherboard with 256k Cache & AMI BIOS

VISA/MC - Call MIS to Order

800-859-5080

HYPER!

The Hypertext Reader for TBBS/TDBS

• RIP & ANSI terminals • HTML compatible files

Links can call TBBS functions. Build your own or use pre-existing databases. Customization & frequent features upgrades. Nagware trial version.

\$50 from sales@htsinc.com

sysop at 1:362/1211 modem 615/267-1562

voice/fax 615/886-1717

HTS • box 456 Signal Mtn TN 37377

BBS Remote Support

Services For Your BBS... We Support ALL BBS Products!

- ✓ Remote SYSOP for Your BBS
- ✓ Remote HELP Desk (800) for You and Your Customers
- ✓ Remote Custom Programming: Menu Screens/Database/Graphics
- ✓ Remote Customer Fulfillments: Postcard/Letter/Phone/Fax
- ✓ Online Application Design/Install

Summit Software Services

732 S. W. 3rd Ave. Suite 411 Portland , OR 97204 (503) 226-6250 BBS (503) 721-9077 sysop (516)757-6600 northport,ny LI since 06/01. Sysop: walter partridge. Using MajorBBS 6.21 with 8 lines on MS-DOS with 2,000 MB storage. US Robotics at 14400 bps: \$10,25 900 servie fee. HOTTEST GAMES, TONS OF ADULT DOWNLOADS, 24 HOUR WORLDLINK ACCESS, FREE ACCESS TO ALL NEW USERS!

Nuthin Fancy BBS (516)797-5376 Long Island, New York since 02/94. Sysop: Rob Kern. Using Power BBS 3.5 with 2 lines on WINDOWS with 2000 MB storage. Supra at 14400 bps. \$25 Annual fee. A BBS dedicated to Adult files. No InterNet. No doors. No FIDO. Nuthin Fancy. We concentrate on what you want. Quality Adult GIF's, scans and text files. Plenty of DOS and Windows shareware. We are small but, so are our fees. Free Adult trial membership.

Spectra Information Management (516)932-6949 Long Island, New York since 01/93. Sysop: T. Zorn & S. Brohman. Using PCBoard 15.1 with 3 lines on MS-DOS 80386 with 7500 MB storage. ZyXel at 16.8 bps. No fee. DOS, OS/2, Windows shareware with 7 CD-ROMS. One line supports ZOOM 24K. Small monthly fee allows access to all areas, including adult, and Internet E-mail and Usenet Groups. Voice mail support for newcomers.

House Of Files BBS (516)938-6722 Hicksville, New York since 08/85. Sysop: Jim Toro. Using TBBS 2.2 with 32 lines on MS-DOS with 35000 MB storage. Hayes at 14400 bps. \$125 Lifetime fee. Largest file system in New York. Over 150,000 files always online. Over 10,000 music files, and tens of thousands of others. Internet email and Usenet News. Call us and find out why hundreds of sysops subscribe to our system. Browse around for free.



- Images that Pull You into the Action
- · Photos that Pop Out of Your Screen
- . Hot Models to Talk to on Our Chat Line
- HIGH RES. 3-D PHOTOS
- VIEW OR DOWNLOAD
- FREE VIEWING GLASSES
- FREE VIEWING SOFTWARE

No Modem? No Problem! Ask for Our 3-D Floppy Disk Starter Kit!

To Order Your 3-D Glasses, Software and Logon Code CALL...

3rd Dimension

Voice - 818-865-8210 BBS - 818-865-0496

Adults Only. You Must Be Over 21 Years of Age.

Wolverine (517)695-9952 Freeland, Michigan since 07/88. Sysop: Rick Rosinski. Using PCBoard 15.1 with 7 lines on MS-DOS 80486 with 14000 MB storage. US Robotics at 19200 bps. \$35 Annual fee. Mid-Michigan's Largest BBS with over 100,000 files. Files for Windows, Amiga, Mac, IBM, more. Official Support BBS for SkyGlobe. Apogee, Eipc, MVP, Software Creations, MoraffWare Distribution Site. FidoNet, RIME, USPOINet. 13 CD-ROM's. Subscribe online.

GAMES PLUS (608)822-2000 Fennimore, Wisconson since 09/93. Sysop: Tim Brown. Using MajorBBS 6.21B with 32 lines on MS-DOS 80486 with 10000 MB storage. US Robotics at 14400 bps. No fee. The hottest new games, from chariots to chessboards, dungeons to deep space. Tradewars 2002. 9 CD-ROMs, trivia, interlink chat, forums. Now offering RIP graphics. Internet mail and network newsgroups coming soon. We are free.

Amigatized BBS (609)443-8230 East Windsor, NJ since 06/92. Sysop: Cool. Using Cnet Pro 3.0 with 2 lines on AMIGA with 2000 MB storage. US Robotics at 16800 bps. \$25 Annual fee. 2 lines on an Amiga 4000/030 with 1 gig and 2 cdroms on-line. USR Dual Standard 168 and Supra 288.\$15 a half a year/\$25 for full year.Clink Network and Tradernet. Thousands of recent MS-DOS and Amiga PD/Shareware files.Doors,chat,Conferences,Rip Graphics

The —DETOUR—> BBS (609)896-3691 Lawrenceville, New Jersey since 11/92. Sysop: Bill Roman. Using PCBoard 15.1/100 with 15 lines on MS-DOS 80486 with 22000 MB storage. US Robotics at 38400 bps. \$45.00 Annual fee. New Jersey's Largest PCBoard BBS. Over 220,000 FILES! 29 CD's ON-LINE! 1800+ E-Mail conferences, Continuous Satellite Feed of files and E-Mail. 4 Gigs. of Adult Material, Monthly Contests, FREE Trial Membership, rates as low as \$12. Give us a call TODAY!

P.C. MegaMall Systems (612)488-5112 Saint Paul, Minnesota since 12/90. Sysop: Michael Wielenberg. Using MajorBBS 6.12 with 6 lines on MS-DOS 80486 with 900 MB storage. Digicom at 14400 bps. \$1 Hourly fee. Many features include: Ripscript, Chat, Online Games, Large file Library, Internet, E-mail, Local Forums, Doors, and much much more to see. Multiple membership packages available. Call for a limited free trial offer!

The 3rd Eye Electronic Erotic Magazine (615)227-6155 Nashville, Tennessee since 05/86. Sysop: Guru Chev. Using TBBS 2.2 with 16 lines on MS-DOS with 2000 MB storage. Hayes at 28800 bps. \$39 Annual fee. Serving open-minded free-thinking couples with an interest in the responsible swinging lifestyle. Personal Ads (all lifestyles). Digitized photos of members. Multi-user chat and multi-system chat linkups. Organized Socials. Lifestyle support. Much more.

Foxfire BBS (615)484-7372 Crossville, Tennessee since 08/92. Sysop: Ken Booher. Using Renegade 3-25 with 1 line on MS-DOS with 2200 MB storage. Zoom at 14400 bps. \$30 Half Year fee. 1.3 Gigabytes of files. Dedicated to independent living, self sufficiency, and survivalism. FidoNet and soon, SurvNet. Games for the competitive. Trial access provided. Become financially independent, learn to do things for yourself, and survive.

Rose & Crown BBS (615)892-0097 Chattanooga, Tennesse since 06/85. Sysop: David Ellison. Using PCBoard 15 with 6 lines on MS-DOS 80486 with 70000 MB storage. US Robotics at 14400 bps. \$33.00 Annual fee. 100 Disk CDROM Changer on line, 70 Gigabytes, no limits no ratios, my callers are never asked to upload. 30 minutes per day free, download with first call. RIME Echomail. No byte limits, no file limits. This may be the perfect BBS for you.

Lemuria Inc. (616)935-4848 Traverse City, Michigan since 01/94. Sysop: Troy Keith. Using MajorBBS 6.21 with 15 lines on MS-DOS with 1000 MB storage. Zoom at 14400 bps. \$15 Monthly fee. Online news, weather & sports, internet email and newsgroup access. Local features, adult material and teleconferences, 6 gigs of shareware, computerized dating service and much more.

Mount Kailas BBS (617)252-9988 Cambridge, Massachusetts since 03/94. Sysop: Lobsang Tashi. Using MajorBBS 6.2 with 5 lines on MSDOS with 540 MB storage. Intel at 14400 bps. \$40 Annual fee. Virtual Dharma Center featuring a calendar of teachings and events from the Buddhist Centers in the New England area. INTERNET Forums, Special Interest Groups, Real-time teleconference, extensive File Library (text and GIFS), and more.



Over 1200 original, copyrighted GIF images of attractive young amateur models- The Girl Next Door as you've never seen her! BBS-ready.

No extra licensing fees. Avoid Copyright hassles! \$59 plus \$3 S&H.

We carry many other bbs-ready adult titles. Call or write for a free list.

(You must be over 18).

CLEARLIGHT SOFTWARE Dept. BW, P.O. Box 1411 Milwaukee, WI 53201 (414) 962-2616

CD-ROM Data Storage & Graphics Services

CD-ROM, Tape &
Diskette Data conversions
Catalogs & Inventories
Documents & Fiche
Photos, Slides & Transparencies
VHS to stills & animated clips

All of your data stored on CD-ROM. Rates range from \$50 minimum to \$175 for full CD from data tape. Volume discounts and a full line of graphics services available.

Allmedia Data Service 1-800-490-0547 10263 John Hollis Rd., Hammond. LA 70403 City Solutions Institute's BBS (617)547-1250 Cambridge, Massachusetts since 01/89. Sysop: Michael Rollins. Using PCBoard 15.1 with 4 lines on MS-DOS with 8000 MB storage. Hayes at 28800 bps. \$25 Annual fee. Access free Cities newsgroup cities@csi.cambridge.ma.us. Email to listserv or join@csi.cambridge.ma.us and place sub cities your-internet-address in message. Affect political policies. Access political & economic forecasts. Be part of solution join.

The White Zone BBS (617)969-3138 Newton Highlands, Massachusettes since 10/90. Sysop: David Saganey. Using TBBS 2.2 with 8 lines on MS-DOS 80486 with 4400 MB storage. US Robotics at 16800 bps. \$25 Quarterly fee. 2.6+GB of IBM MS-DOS Shareware, Midi & Soundcard Files, Windows, WazWare & More. Online Games, Classified Ads, BBS Listings, QWK Offline Mail Reader Support, Newsbytes Weekly & PC Catalog Online. ASP Approved BBS. Call Today!

THE ROSICRUCIAN FELLOWSHIP BBS (619)721-1828 Oceanside, California since 06/92. Sysop: Marie-Jose CLERC. Using MajorBBS 6.2 with 1 line on MS-DOS with 525 MB storage. Practical Peripheral at 14400 bps. No fee. Dedicated to the promulgation of Rosicrucian Christianity. Multilingual text file library of the written legacy of Max Heindel, founder of The Rosicrucian Fellowship, an International Association of Christian Mystics. RIP Graphics support. Free.

Crystal Quill (703)241-8757 Arlington, Virginia since 04/93. Sysop: Crystal. Using MajorBBS 6.21 with 74 lines on MS-DOS with 4000 MB storage. US Robotics at 14400 bps. \$.60 Hourly fee. DC's Premier BBS. 74 line chat-based system with MailLink, Interlink, MajorNet and Internet. 4 Gigs of files on CD-ROM, adult & teen areas, multiplayer games, matchmaking facilities, MC, VISA, 900; First 2 hours free. Telnet in. cq.cqi.com

Back of the Rack (703)264-0255 Reston, Virginia since 05/94. Sysop: Dave Clark. Using TBBS 2.2 with 2 lines on MS-DOS with 1000 MB storage. PPI at 28800 bps. No fee. We offer onliners, live chat and support for DOS and OS/2. Monthly software giveaway. We also have low Internet mail prices. Virtual Sysop, Legends, Bandwarz and more. Join us as we add more features and enjoy the ride through online telecommunications.

FREE Internet UUCP Access for a Month!

Tired of Internet providers that don't understand the needs of your BBS?

So were we!

That's why **JBX Online** was started by BBS Sysops - to provide the experience and understanding needed to keep your BBS both unique and efficient when it comes to e-mail and newsgroup processing. And if you sign up now for a year, you'll get a free month of service. Call now to start your service today!

No hourly connect fees!

JBX Online

(407) 375-9808

P.O. Box 520 Boynton Beach, FL 33425 We proudly accept NetCash! World Data Network (703)620-8900 Washington, DC since 10/84. Sysop: Tony McClenny. Using PCBoard 15.2 with 35 lines on MS-DOS with 1200 MB storage. Hayes at 28800 bps. No fee. Internet telnet wdn.com (E-Mail, ftp, news, telnet), largest Washington, DC metro PCBoard, 35 lines, 28.8k modems, 100 doors, 80k files, PC World news, <ASP> & AOP, 3000 mail network forums, free access. PCBoard reseller & installer.

POPULUS II (706)569-0773 Columbus, Georgia since 05/93. Sysop: David McAfee. Using MajorBBS 6.12 with 2 lines on MS-DOS 80386 with 600 MB storage. TWINCOM at 38400 bps. No fee. Windows, Programmer's Support, C++, Object-oriented Programming, Flash games, On-Line Chat, CD-ROM's, Programming Available. FIDO, Local messaging, and pay service INTERNET.

The Party Line BBS (707)588-8055 Rohnert Park, California since 12/85. Sysop: Jami Chism. Using MajorBBS 6.2 with 12 lines on MS-DOS 80486 with 4800 MB storage. Practical Peripheral at 14400 bps. \$10 Monthly fee. Internet Email, Usenet newsgroups, RIP Graphics, Nationwide ChatLink, PC Catalog, Newsbytes, Multi-Player Tradewars 2002, 6 Recent CD-ROMs, Free Trial. For information via Internet email: jami@partyline.com. MajorNet email: sysop@xcl

The Outer Limits BBS (708)289-0034 Chicago, Illinois since 05/92. Sysop: Mistress Crystal. Using Syncronet 1 with 12 lines on MS-DOS 80486 with 3000 MB storage. Various at 14400 ps. \$20 Quarterly fee. The Midwest's Best D/s, B/D & Fetish On-line Play Party! "Fantasy handles", chat, games, conferences, contests, Adultnet, and 3GB of files make us the board to explore your fantasies and play! Women free, plus no-harassment policy. Visa/MC. 21+ only.

Caer Tuatha (708)393-7750 Warrenville, Illinois since 12/93. Sysop: Gwydion. Using MajorBBS 6.21 with 4 lines on MS-DOS 80386 with 120 MB storage. Cardinal at 2400 bps. \$30.00 Annual fee. Exploring the unknown; Strange and unexplained phenomena, the mystical and the mythical. As your gateway to the unknown, Caer Tuatha invites you to take a peek into that fascinating world that lies just beyond the fringes of the imagination. Free Trial.

Attention SYSOPS
Residual Income
from Your BBS
Receive a monthly check
for saving users money,
on a service they already
buy. Users receive a
free benefit because of
your BBS. Never ask
for money! No fee to
join, just real savings.
Toll Free
Voice Message:
(800) 890-6177 24 Hrs.

MidWest BBS (708)513-1034 St. Charles, Illinois since 02/84. Sysop: Steve Mills. Using PCBoard 15.1 with 15 lines on MS-DOS 80486 with 7500 MB storage. Hayes at 28800 bps. \$45 Annual fee. Call us LAST! We are confident you'll find us to be one of the best, friendliest, most enjoyable Bulletin Board Systems that you have EVER called. Call us for your free trial and get our BBS guide in the mail after you logon. You WONT be dissapointed.

PitStar BBS (708)687-4413 Oak Forest, Illinois since 01/92. Sysop: Pady Smith. Using PCBoard 15.1 with 4 lines on MS-DOS 80486 with 2000 MB storage. Intel at 14400 bps. \$25-90 Annual fee. Multi-purpose BBS with a business and finance flavor. Stock, Commodities quotes, Usenet, Internet Email, GIFs of missing children, current weather reports, 100+ file directories.

COM ONE (708)717-9370 Naperville, Illnois since 05/92. Sysop: Craig Wells. Using MajorBBS 6.21 with 8 lines on MS-DOS 80386 with 6000 MB storage. Incomm at 2400 bps. \$9 Variable fee. Over 60,000 of the most current files with new files daily. 9 cds online, Over 200 MajorNet & Usenet Newsgroups. Internet email w/all subscriptions. Online mags & news. Adult forums, files. Chat Nights & Theme Nights. Phone Support line. Free Demo Time.

Chicago Syslink (708)795-4442 Berwyn, Illinois since 06/81. Sysop: George Matyaszek. Using TBBS 2.2 with 16 lines on MS-DOS 80486 with 1000 MB storage. Hayes at 14400 bps. \$30 Annual fee. Rated G, so the entire family can call. New CD-ROM online every weekend. 100+online games, MicroMatch/Find-A-Friend, Internet/Fidonet, USAToday, Worldwide HUB for Virtual Sysop, OutDial Service to Other BBS's and something for All.

WANTED - SYSOPS

The Nation's Largest
Public Real Estate Network
is looking for Sysops in
various locations in the
U.S., Canada and Europe.
High profit potential!
Call for details.

Visual Link_{tm}
Telecommunications
(703) 667-6431 Voice
(703) 722-2086 Fax
(703) 722-0281 Data
mbayliss@visual.cscns.com

AlphaOne Online (708)827-3619 Park Ridge, Illinois since 03/90. Sysop: Toby. Using TBBS 2.2 with 18 lines on MS-DOS 80486 with 8500 MB storage. Hayes at 28800 bps. \$36 Annual fee. You've seen the rest-now try the BEST! 100,000+ Files. Online stores. CHAT, matchmakers, adult games 150+ conferences. Fidonet, Adult Link, GayCom. Get the most for your online \$! CALL & mention this ad for FREE TRIAL. For more info voice-708-827-3615

THE WILD ONION! (708)993-0461 Chicago Metro-area since 05/93. Sysop: ALT@ONION.COM. Using MajorBBS 6.21 with 50 lines on MS-DOS 80486 with 12500 MB storage. US Robotics at 14400 bps. \$10 variable fee. Chicago area's premier all adult social BBS. Chat, local Forums and 20+ games. 75,000+ files and GIFs online. Large Adult Forums area. INTERNET NEWS and mail. MAJORNET and WORLDLINK. PC Pursuit thru ILCHI.

Data Warp Premium Computer Systems (713)355-6107 Houston, Texas since 07/88. Sysop: Mike Meyer. Using PCBoard 15.1 with 5 lines on MS-DOS 80386 with 2500 MB storage. US Robotics at 38400 bps. \$20 Quarterly fee. One of Houston's largest general interest BBS systems. Thousands of files, dozens more posted daily. Hundreds of message conferences, including Usenet newsgroups, Internet email @dwarp.com, ILink and Annex networks. Adult areas available. Free or fee.

The Entrepreneur Connection (714)280-9556 Anaheim Hills, California since 01/94. Sysop: Tim R. Sills. Using MajorBBS 6.21 with 4 lines on MS-DOS with 500 MB storage. US Robotics at 14400 bps. \$60 Annual fee. If you ever wanted to start a business but didn't know how, this is the place to call. Learn step-by-step how to start & run your own business through our business software, calendar of classes & seminars, & online bus. directory. Call now for free demo.

Check Six BBS (714)362-8299 Laguna Niguel, California since 06/93. Sysop: Patrick Gost. Using PCBoard 15.1 with 5 lines on MS-DOS 80486 with 1.2 MB storage. Hayes at 28800 bps. \$5 Monthly fee. Latest flight simulation updates, utils, and msgs. Internet Email, USENET (air combat, flt. sim, etc.). Official customer support forums for Keyboard Commander Corp (kcc@checksix.com) and ThrustMaster (thrustmaster @checksix.com). SimNet member BBS.



Fantasia Services Unlimited (714)579-7022
Anaheim Hills, California since 06/93. Sysop:
Paul Egger. Using MajorBBS 6.21 with 16 lines
on MS-DOS with 15000 MB storage. PPI at
14400 bps. No fee. Massive BBS featuring
message forums, National ChatLink, Internet
Email and Newsgroups, CD-ROM file library,
online tournament gaming. Dedicated to
providing top quality adult entertainment. Take
advantage of our free accounts to see why we're
the best.

The Viewlink BBS (714)650-4612 Costa Mesa, California since 10/92. Sysop: Terry Andrews. Using WildCat 3.9 with 4 lines on MS-DOS 80386 with 1400 MB storage. US Robotics at 14400 bps. \$10 36 days fee. Latest shareware, hottest adult GIFs and FIFs, Temp Jobs, latest hot shareware GAMES. 28 cents per hour. Upload GIFs for more time. Chat for all. 10 Conferences and 109 File Areas. Login 4 more info. You must be 18 or older, please.

Interludes BBS (714)828-7093 Cypress, California since 01/89. Sysop: Angela Duarte. Using MajorBBS 6.21 with 13 lines on MS-DOS 80486 with 3000 MB storage. Supra at 14400 bps. \$4.95 Monthly fee. Local numbers available. Multiplayer games, Internet Mail, Usenet, Majornet mail, nationwide chat, matchmaker, and more! Home of Humanware Systems (TPD of MajorBBS utilities). Low rates. Fast and friendly system with great users!

The Solar System (714)837-9677 Mission Viejo, California since 12/88. Sysop: Peter Guethlein. Using WildCat 3:9 with 6 lines on MS-DOS with 15000 MB storage. US Robotics at 28800 bps. No fee. Awesome ANSI & RIP Graphics, FidoNet 1:103/957, Internet, Intelec, MetroLink Echomail & more. Space Tteme, over 90 live door games, very unique high quality BBS, free access available, support board: B-CRC upload file duplication scanner.

CWI-BBS: The Alternate Route Adventure (714)870-1033 Fullerton, California since 05/94. Sysop: Jimmy Chen. Using PCBoard 15.1 with 16 lines on MS-DOS with 2000 MB storage, US Robotics at 14400 bps. \$52 Annual fee. Entire CWI shareware disk catalog plus 6 CD-ROMs online. ASP approved. The BBS uses disk numbers as filenames for easy download. Select shareware from a free color catalog, then download. Friendly chat rooms. SIGS coming soon.

The Liberty BBS (714)996-7777 Anaheim Hills, California since 07/92. Sysop: John Galt. Using MajorBBS 6.12 with 134 lines on MS-DOS 80486 with 5420 MB storage. ZyXEL at 16800 bps. \$10 Monthly fee. Local to callers from 8 California area codes! Nationwide ChatLink, WorldLink, MailLink, MajorNet, INTERNET & Usenet Newsgroups. Use your modem to call 800-474-1818 for local & low cost SprintNet nationwide access info. Chat, games, news, & much more!

Intimate Image Corporation (716)723-3437 Rochester, New York since 09/93. Sysop: Jim Hutchings. Using PCBoard 15.1 with 1 line on MS-DOS with 1500 MB storage. Zoom at 28800 bps. \$25 Annual fee. An adult only system. Age verification is required. We scan our own images, you won't find our stuff duplicated on any other board. XXX-rated images. We are the fastest growing Adult BBS in Rochester. Give us a call and you'll agree that we are best.

Pennsylvania Online! (717)657-8699 Harrisburg, Pennsylvania since 08/81. Sysop: George Peace. Using TBBS 2.2 with 16 lines on MS-DOS with 10000 MB storage. Hayes at 28800 bps. \$8 Monthly fee. The gathering place for everyone. Files, chat, Internet, and more. The full FidoNet backbone and filebone and all Usenet Newsgroups are available. Inexpensive UUCP Accounts. Visa/MC.

Tavern BBS (717)671-3760 Harrisburg, Pennsylvania since 09/94. Sysop: Wayne Granger. Using MajorBBS 6.21 with 32 lines on MS-DOS with 6500 MB storage. US Robotics at 14400 bps. \$10 Monthly fee. Central Pa's newest and largest BBS offering Boardwatch and Online Access mag, tons of shareware, exciting games, featuring Cybertank, chat lounge and matchmaker. All with custom RIP graphics. Immediate access with free demo. Call now and join the club.

Bits 'N Bytes BBS (717)757-4141 York, Pennsylvania since 09/89. Sysop: Bryan S. Leaman. Using PCBoard 15.1 with 3 lines on MS-DOS with 3300 MB storage. US Robotics at 16800 pps. \$23 Annual fee. Large MS-DOS file library including SIMTEL-20 Internet FTP archive, Internet E-Mail, Usenet newsgroups, RIME mail network, up-to-date NOAA weather forecasts, a wide variety of online games. multinode chat. New users receive instant access.

Cyberia (717)840-1444 York, Pennsylvania since 06/93. Sysop: Adam Viener. Using TBBS 2.2 with 15 lines on MS-DOS 80486 with 3300 MB storage. US Robotics at 28800 bps. \$7 Monthly fee. Receive Internet mail for FREE! Cyberia is a professional system offering USA Today news, Boardwatch, PC Catalog, Chat, Games, Quality Shareware, Internet, Fidonet, RIP & Blind Access, Everyone gets a FREE trial account. Now available via Global Access.

KITTY'S CAFE! (718)352-1720 Queens, New York since 08/94. Sysop: Kitty. Using WildCat 3.91 with 2 lines on MS-DOS with 3000 MB storage. Hayes at 14400 bps. \$30 Monthly fee. Adult only BBS. Classified ads from all lifestyles, including Gay/Lesbian Corner, B&D, plus many other alternative lifestyles. Ladies always free. Men get first month total access free. We take Master Card, Visa, AMEX, checks, or monthly billing.

Rama One BBS (R1C) (718)366-6165 Glendale, New York since 01/94. Sysop: Tommy Brunning. Using MajorBBS 6.21 with 3 lines on MS-DOS with 10000 MB storage. Gateway Telepaths at 14400 bps. \$1 Hourly fee. Specializing in SVGA graphics and ASP shareware. 14 CDs full of exciting GIF images. Monthly ASP CD with the newest in shareware. Approved by the ASP, member of the IMBBSA and distributor for Apogee and Software Creations. You can't lose here.

ABC Online (718)446-2157 Queens, New York since 10/93. Sysop: Michael Hajovsky. Using TBBS 2.1 with 5 lines on MS-DOS with 21000 MB storage. Hayes at 28800 bps. No fee. Over 100,000 files, GIFs, online publications, news, databases, Internet email, and Usenet newsgroups, special interest forums, online games. All high speed 28,000 modems. One month free trial period. MasterCard and VISA accepted. You must be 18 or older

Quantum 2000 BBS (718)740-8411 Queens, New York since 05/94. Sysop: Michael Lee. Using WildCat 3.91M with 2 lines on MS-DOS with 1200 MB storage. Practical Peripheral at 14400 bps. No fee. Specializing in Door games (over 30 online), CD-ROMs, various conferences and Adult areas! Many packages available from 6 mths to 1 year. Fidonet and Internet are coming soon! We now accept credit cards so you get instant access! Friendly Sysop!

The Icebox BBS (718)793-8548 Flusing, New York since 04/88. Sysop: Darren Klein: Using PCBoard 15.1 with 5 lines on MS-DOS with 34000 MB storage. Microcom at 28800 bps. \$25 Annual fee. Internet/USEnet access. Thousands of files available for download. Many online games. Chat live with users. Offline mail reader. New files daily. Many famous echo'd mail networks. Visa Mastercard Accepted.

The Fanatics Bulletin Board System (718)967-6827 Staten Island, New York since 11/90. Sysop: David Dempsey. Using PCBoard v15.1 with 5 lines on MS-DOS 80486 with 10000 MB storage. Microcom at 28.8 bps. No fee. Internet, Direct Windows Support, Rimenet, RipScript Supported, 24 Hour Voice & Fax Lines, Novell Technical Support, Windows and OS/2 Patches, RoseMail & Qmail Offline Mail Readers Supported, Strategy & RPG Gamers Welcomed, Online RPG Games & Much More!

The Northern World BBS (718)987-8786 Staten Island, New York since 08/93. Sysop: Allen Kaplun. Using MajorBBS 6.21d with 2 lines on MS-DOS with 8370 MB storage. Zoltrix at 14400 bps. \$19.94 Annual fee. Over 50,000 files! FAX center, MajorNet, and online games! Soon to have 25 GIGS Online! - Including Technical Shareware, ADULT GIFS, more games and business applications; hacking, and phreaking info! VISA/MC/AMEX acceptd. FREE 1 month TRIALACCESS!

THE HOLE BBS (804)431-1800 Virginia Beach, Virginia since 03/92. Sysop: Stu Grant. Using Remote Access 2.02 with 2 lines on OS/2 with 1210 MB storage. DataFax at 28800 bps. No fee. Supports all ver. of Geoworks Ensemble (PC/GEOS): features FidoNet Geoworks international echo plus files for all versions of PC/GEOS (d/l first call). Higher LD access level. FidoNet Geoworks Echo BBS list. Memberships available. A free BBS. Call today.

CompuVision On-Line Entertainment System (804)548-1988 Virginia Beach, Virginia since 05/93. Sysop: Russ Salter. Using Excalibur .65 with 8 lines on MS-DOS 80486 with 2000 MB storage. ZyXel at 16800 bps. \$10.00 Monthly fee. CompuVision is the premiere Windows based system in the country. Use our Free windows terminal to view full color graphics, GIFs while online. Mouse support and sound, familiar windows interface. Say goodbye to ANSI and RIP.

Time Out! BBS (804)596-2131 Newport News, Virginia since 06/94. Sysop: Mark Solomon. Using PCBoard 15.1 with 3 lines on MS-DOS with 5000 MB storage. Hayes at 28800 bps. \$35 Annual fee. Internet email \$35 per year. RelayNet(tm) International Message Exchange (RIME). I especially cater to college students. Get the latest and best in Doom editors, and all shareware. 5 CD-ROMs, 800 megs disk space. I'm working to be your favorite BBS.

The Underworld Adult Entertainment Sys. (804)750-1142 Richmond, Virginia since 09/93. Sysop: Alan Jeric. Using Excalibur .7 with 1 line on MS-DOS with 8300 MB storage. Digicomm at 14400 bps. \$25 Annual fee. 7 CD's online. Over 70,000 files. Online GIF previews in seconds. View GIF.'s as they download. User end multitasking. Fully mouse driven GUI, free Windows term program, and much more. The Best in adult entertainment. Give us a call, you won't be sorry.

ONE EYED JACK'S (810)399-2845 DETROIT since 09/93. Sysop: JACK. Using TBBS 2.2 with 2 lines on MS-DOS with 3500 MB storage. Hayes at 14400 bps. \$45¢ PER FILE fee. Huge selection of adult gifs! 3 CD-ROMs online. NO time charges, only 45¢ per file downloaded. Set up for the first time user in mind! Throbnet, Fidonet

One Eyed Jack's (810)399-2845 Oak Park, Michigan since 09/93. Sysop: Jack. Using TBBS 2.2 with 2 lines on MS-DOS with 3500 MB storage. Hayes at 14400 bps. \$.45 per file fee. Hot adult graphics. Easy to Use. We are set up for the first time BBS caller. Over 10,000 hot images to choose from, with no time limit or hourly fees. Only 45¢ per file downloaded.

SHARE Warehouse (810)412-8177 Clinton Township, Michigan since 01/94. Sysop: Rick Wadowski. Using PCBoard 15.1 with 4 lines on MS-DOS with 5500 MB storage. US Robotics at 14400 bps. \$35 Annual fee. Free 7 day trial. 100,000+ files on 24 CDROM's. No ratio/byte limits. Over 1300 conferences with 25,000 new msgs/day and 50-75 new files/day from our satellite downlink. Member Fido, RIME. We never ask for uploads.

Mercury Opus (813)321-0734 St. Petersburg, Florida since 09/88. Sysop: Emery Mandel. Using PCBoard 15 with 10 lines on MS-DOS 80386 with 12000 MB storage. Hayes at 28800 bps. \$30 Half Year fee. Huge message area, over 2000 conferences, 100,000 quality Amiga, Mac, DOS, Windows, OS/2 and adult files with new files daily, 10+ networks including Internet and Usenet, games, chat, matchmaker, fax gateway, BBS lists, instant access via credit card.

A to Z Classifieds (813)726-8088 Clearwater, Florida since 07/93. Sysop: Ed Marquardt. Using TBBS 2.2M with 2 lines on MS-DOS 80486 with 210 MB storage. Hayes at 14400 bps. No fee. Classified Ads and information. Sell your car, your boat, your house, or any other item. Advertise your business. Look for employment opportunities, and much more.

CyberSpace DataBase (813)796-5627 Clearwater, Florida since 09/82. Sysop: Steve Sanders. Using PCBoard 15.1 with 3 lines on MS-DOS 80486 with 10000 MB storage. US Robotics at 28800 bps. \$50.00 Annual fee. Everything for Windows, Sound Cards, VGA games, DTP, HAM Radio, AMSAT, Adult GIFs, Utilities, Applications, Spreadsheets, more. 12 CD-ROMs and BIG hard drives = 80,000+ files! Hi-resolution GOES weather satellite photos daily. V.Fast Class modems!!!

The Emporium BBS! (817)543-4250 Arlington, Texas since 10/88. Sysop: Henry Buchanan. Using Remote Access 2 with 20 lines on MS-DOS 80486 with 6000 MB storage. US Robotics at 19200 bps. \$75 Annual fee. One of the largest collections of adult files! Over 17,000 adult files online. Adult games online, with online chat and messages! ADULTS only! Must be 21 years of age or older! Immediate adult access w/valid credit card - VISA, Mastercard, Discover, AMEX

Panasia BBS (818)569-3740 Glendale, California since 05/89. Sysop: William Padilla. Using PCBoard 15.1 with 2 lines on MS-DOS with 425 MB storage. US Robotics at 28800 bps. No fee. We offer Internet email access and carry all conferences for the following echomail networks: Intelec, ThrobNet, PlanoNet, BasNet, JobNet, FSnet, MegNet, and ILink. QWK/REP available via Qmail. Modest file area. Access is free. New users welcome.

The Wine Connection BBS (818)718-5994 Winnetka, California since 11/93. Sysop: Paul Sennett. Using TBBS 2.2 with 5 lines on MS-DOS 80486 with 250 MB storage. ZOOM at 14400 bps. No fee. Your best connection for Fine Wine! Communicate with other Wine Enthusiasts about Fine Wines you want to buy or sell and also about many other Wine Topics. Glossary of Wine Terms, Grape Varieties, California's Premium Wineries, and much more.

Barter Exchange BBS (818)999-1829 Calabasas, California since 01/90. Sysop: Richard Montaine. Using Excalibur .67 with 8 lines on WINDOWS with 12000 MB storage. AT&T Paradyne at 19200 bps. No fee. Multitasking BBS which allows users to download, upload, chat and E-mail all at the same time. Never be bored waiting for a file to finish. You can now do many things at once. I recommend that only high speed modems call when accessing the file library.

DRAGON KEEP INTERNATIONAL (904)375-3500 Gainesville, Florida since 01/87. Sysop: Dragon & Cerebus. Using WildCat 6.21 with 50 lines on MS-DOS 80486 with 5000 MB storage. US Robotics at 14400 bps. \$.25 Hourly fee. Real-time multi-player games, 24 Hr live chat featuring Global Chatlink every night at 10PM. Over 50,000 files, 6 CD-ROM's, MajorNet, NetAccess. Full Internet access (Telnet/IRC/FTP). Telnet to dkeep.com (198.79.54.10) Instant access w/credit card.

The Gay Blade (905)882-4800 Toronto, Ontario since 01/90. Sysop: Richard Kamus. Using TBBS 2.2 with 20 lines on MS-DOS with 5000 MB storage. ZyXel at 19200 bps. \$20 Hourly fee. The Gay Blade provides online chatting, online games, and message bases of interest to those living an alternate lifestyle. Networks include GayCom, La'Net, Studsnet and Internet. A wide variety of membership alternatives are available.

Alaska Virtual Online (907)522-1347 Anchorage Alaska since 01/94. Sysop: Viper. Using MajorBBS 6.21d with 16 lines on MS-DOS 80486 with 2140 MB storage. US Robotics at 19200 bps. \$10 Monthly fee. We offer 6 CD's, online shopping, games, Internet newsgroups and email, online graphics thru DC-Net and RIP. Ww are Alaska's biggest BBS.

Programmer's Resource Center (908)355-9298 Elizabeth, New Jersey since 04/94. Sysop: Robert Villar. Using WildCat 3.9 with 2 lines on MS-DOS with 540 MB storage. Boca at 14400 bps. \$5 Monthly fee. This BBS caters to programmers and professionals. Thousands of source code files and tools to make life easier. On your first call, mention that you read Boardwatch and you get a Free 6 month subscription. Games and educational files available.

INSTANT ACCESS (908)888-3959 Hazlet, New Jersey since 01/91. Sysop: Richard Camba. Using PCBoard 15.1 with 10 lines on MS-DOS with 25000 MB storage. Hayes at 28800 bps. \$6 Monthly fee. Progressive adult & non adult file/msg areas. With over 22 gig of files & 1800+satellite linked message areas to suit all lifestyles. Full Internet access. Telnet us at instbbs.camba.com. Instant access via credit card or TABS - free trail access.

Legend Graphics OnLine (909)689-9229 Corona Hills, California since 11/91. Sysop: Joey Marquez. Using PCBoard 15.1 with 16 lines on LAN Network 80486s with 12000 MB storage. US Robotics at 28800 bps. \$5 Monthly fee. Nation's one stop graphics BBS. You will be impressed. Huge adults only file areas. Simply the best in Southern California. SuperVGA photo images, video in motion MoviePICs. Visa MC AmExp Optima accepted.

Kacey's Software Castle (914)567-1308 New Windsor, New York since 11/93. Sysop: Maria DeNoyelles. Using TriBBS 5.1 with 2 lines on MS-DOS with 500 MB storage. Supra at 19200 bps. \$20 Annual fee. Home of Ladies-On-Line Network for Women. Door Contests. \$20 Year/Full Access.

FOR ADULTS ONLY Bulletin Board System (916)962-3973 Sacramento, California since 01/88. Sysop: Dale DeBord. Using Oracomm-PLUS 7.1 with 17 lines on MS-DOS with 3000 MB storage. Practical Peripheral at 14400 bps. \$6-11 Monthly fee. Sacramento's largest and friendliest Adult chat, files system. Adult message bases, chat, GIF, GL, DL, FLI, text and game files. Free member GIFs. Referred by Adult BBS Guidebook, Cybersex, Playboy. Free 3-hour trial perion. Download on first logon.

Black Gold BBS (918)272-7779 Tulsa, Oklahoma since 06/81. Sysop: Michael Cline. Using PCBoard 15.1 with 26 lines on MS-DOS with 38000 MB storage. US Robotics at 28800 bps. \$30 Annual fee. Full PageSat and Planet Connect. 56k connect to Internet, 100 Doors, Full time SYSOP's and much much more. Many free areas and files with 45 minutes free access per day. 350 file areas, 3+ million messages less than 7 days old. Never Porno/Just hard work

ACCESS AMERICA (918)747-2542 Tulsa, Oklahoma since 03/88. Sysop: Vance Martin. Using TBBS 2.2 with 5 lines on MS-DOS with 6,500 MB storage. Hayes at 14400 bps. \$25 /100 hours fee. REAL ESTATE MARKET with photos, Internet mail & newsgroups, JOBMARKET, Ultra Chat, QWK mail system, PhotoClassified ads, FidoNet, Matchmaker & Personal Ads, multi-player ANSI & RIP games, 40,000+ files, 8 CD-ROM's, Oklahoma & Branson travel info & MORE!

Entertainment Club BBS (919)544-7811 Research Triangle Park, North Car. since 04/94. Sysop: Brian Womack. Using MagNum OS/2 7.00C5 with 4 lines on Pentium/60 OS/2 with 8GB MB storage. Zyxel at 19200 bps. \$8++ Annual fee. 1000++ File areas (40,000++ files w/ 6 SW CDROMs update quarterly), 500++
Message sections — will add more at user's request. 40++ REGISTERED Multi-User Games (Inter-BBS/Real-Time), Color Scanner serv. MatchMaking services (doors, parties) BARGAIN!



High-speed 16550 I/O boards

16550 UARTs allow high-speed serial I/O... without loss of data

All boards listed have 16550 UARTs. Some boards also available with 16450 UARTs.

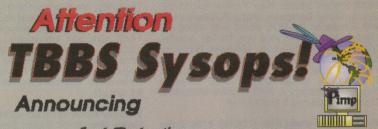
COMI-COM4 selectable, independent IRQs.

Stock	Ser	IRO	Par	FDD	IDE	Gam	BUS	Price
8200	2	2-5	1-Bi	N/A	N/A	No	ISA	29.95
9011	2	2-7	N/A	N/A	N/A	No	ISA	33.95
8300	2	2-5 *	1-83	N/A	N/A	No	ISA	37.50
8400	2	2-15 **	1Epp	N/A	N/A	No	ISA	45.95
9013	4	2-7	N/A	N/A	N/A	No	ISA	69.95
9073	4	2-15	2Uni	N/A	N/A	No	ISA	89.95
8500	2	2-5 *	1-83	4	2	Yes	ISA	53.35
8600	2	2-15 **	1Epp	2	2	Yes	VLB	51.50
8700	4	2-5 **	2Epp	4	2	Yes	VLB	119.00

Dealers wanted, quantity pricing available.

- * 83-byte FIFO for enhanced bi-directional parallel performance.
- ** EPP 1.9 support for bi-directional parallel as well as an 83-byte FIFO. Superfast!

800-274-7897 **Byte Runner Technologies** 615-966-0058 406 Monitor Lane Knoxville, TN 37922 Fax 615-675-3458



Jack Rickard's

Personal Internet Mail Processor (PIMP) Version 3

Option Module for TBBS

Let PIMP connect your TBBS system to the world!

The hottest area in the Bulletin Board world today is making the connection to the global internet e-mail network. Allow your callers to send and receive electronic mail to CompuServe, GEnie, America Online, and thousands of other hosts in over 40 countries around the globe.



Internal UUCPg Protocol Dialer



Usenet News Groups



FTP File Server



Open PIMP



Malling List Server



Inbound/Outbound File Attachments

Uses any available BBS line to automatically dial your host and exchange mail. NO NANNY MACHINE OR LAN REQUIREDI Our own Internal Implementation of the UUCPg protocol.

Your callers deal with internet mail using all the features of the existing TBBS message system - replies, searches, message scan, forward, file attachments, message waiting que, .QWK offline mail readers (requires eSoff's QSO option module). PIMP extends your TBBS message base to encompass the world, making global mail easy for your callers. Messages can go out within one minute after caller entry.

PMT for TRRS - Option Module Version - \$299,00 vision

For more information or to order, Call Boardwatch Magazine at: (303) 973-6038 (303) 973-3731 fax, (303) 973-4222 BBS

PHOTO BASED ONLINE CATALOGS



MOUSE DRIVEN VIA DIALUP OR INTERNET!

TERMINALS THAT WORK WITH ANY HOST FOR FAST PHOTO IMAGING

- * Major, TBBS, PCBoard, new WC! 4, Unix, Mac, anything that supports Zmodem can be upgraded to fast, high quality imaging.
- * Eleven image formats are viewable: fractals (FIF, highest quality), JPG, GIF, BMP, PCX, EPS, PICT, TGA, WMF, TIFF, and WPG. Images and text are displayed to the screen in 5-10 seconds!
- * **Supports any database** and can present any found images with the associated database file.
- * A simple Area/ Directory/ File system (illustrated at left) provides an idiot-proof textwith-photo system designed for ease of use by the public. The A/D/F system is 100% mouse driven, even over the Internet and is completely within graphics mode-images are not regurgitated from terminal mode.

WINDOWS & DOS SOURCE CODE AVAILABLE!

HERE TOMORROW If your organization needs to provide online catalogs or publications capable of fast imaging (5-10 seconds) over plain phone lines, Imagen delivers a solution for today and for the future. You are not tied to proprietary software, which is often underpowered and line count limited. You can move up to NT, Cairo, OS/2, and you'll need no RIP painting routines or be forcing your callers into complex environments that demand DOS video drivers. Everything is standard Windows that you can implement and distribute once. You are provided with a CUSTOMIZED Windows terminal (Your business name, Logo/Bitmap, phone numbers, and Internet addresses are hardwired into it) with an unlimited distribution license.



THE PREZ SEZ... ANY MAJOR DUDE will tell you that big things are afoot on the Internet with Galacticomm's new ICO (Internet Connectivity Option). Like Interchange/ IPAD from eSoft, ICO allows your callers to reduce the Internet to a transparent medium free from Unix

Now the **emphasis will be on images**, and Imagen's Windows terminal **works beautifully with Major BBS**, **TBBS** (and any Zmodem host) to deliver fast photos anywhere in the World. If you can deliver a colorful, vertical application to this audience, you'll see tremendous traffic. The lights are going up on Baudway, at last.



TECHNOLOGY FOR THE FUTURE

Process (few Control Sett) Congregat (196 twice) Constructed that is a first process of the Control Control Sett) Congregat (196 twice) Control Contro

HYPERTEXT ON THE INTERNET

PUBLICATION MODE

Imagen's forthcoming .RTC technology compresses highly formatted pages with multiple columns and images, to as little as 12K, allows downloads in seconds. Mouse driven menus are no longer the issue, now it's hypertext with HTML+ WWW capability, and true 'zine interface for a world audience! Developer inquires invited.

COMPLETE SYSTEMS FROM \$399!

ncludes:

- * Custom Windows (and DOS) terminals
- * Windows batch Fractal & JPEG

Compressors

- * Easy graphics mode Menuing System utility
- * Alan Bryant's "Creating Successful Bulletin Board Systems" and a 2 line version of TBBS.

"When it comes to online viewing the best method I have seen is implemented by Imagen."

Jim Thompson, Boardwatch

IMAGEN

BOARDWATCH MAGAZINE

NATIONAL LIST OF ELECTRONIC BULLETIN BOARDS AND ONLINE INFORMATION SERVICES - October 1994

SERVICE	PHONE	DESCRIPTION	SPONSOR/SYSOP	LOCATION
ABC On-Line	(718)446-2157	21 Gigs online, TBBS, Internet, Fidonet, Entertainment, News	Michael Hajovsky	Queens, NY
ADA 9X Project Bulletin Board	(800)232-9925	ADA Programming Language Revisions and News	Chris Anderson/Susan Carlson	Eglin AFB, FL
ADA Information Clearinghouse	(703)614-0215	Information on ADA Programming Language/Military Specs	Department of Defense	Washington, DC
Advanced Data Services Inc.	(301)695-9116	22 line PCBoard with 5.5 GB of Files	Blaine Brodka	Frederick, MD
Alamo PC Organization	(210)496-5558	Numerous Files, Info	Robert Schoenert	San Antonio, TX
Albuquerque ROS	(505)299-5974	36000 files/USA Today/Tradewars/Online Games	Steven Fox	Albuquerque, NM
America's Suggestion Box	(516)471-8625	BBS Devoted to Collecting and Distributing Consumer Feedback	Joseph G. Jerszynski	Ronkonkoma, NY
American Cybernetics BBS	(602)968-1082	Multi-Edit Product Support BBS	American Cybernetics	Tempe, AZ
AMUG Preferred BBS	(602)553-0721	Support for Mac users, 15,000 files, Conferences	Arizona Macintosh Users Group Inc.	Phoenix. AZ
ANARC BBS	(913)345-1978	World Radio/TV Handbook - Short Wave Freq Lists/Scheds.	Assoc. of North American Radio Clubs	Shawnee Mission, KS
APCUG - GlobalNet	(408)439-9367	Association of PC User Groups - Over 2000 UG officers	Paul Curtis/APCUG	Scotts Valley, CA
Applied Modeling Research RBBS	(919)541-1325	Environmental Protection Agency Atmospheric Models	William Peterson/EPA	Hurdle Mills, NC
Aquila BBS	(708)820-8344	6 GB 25 Nodes Fidonet/Interlink/Metronet MCe IL/CHI Graphics	Kevin Behrens/Steve Williams/Doug Bell	Aurora, IL
Argus Computerized Exchange	(617)674-2345	Multiline Community Chat Service - Restuarant Review dbase	Pam Morrison	Lexington, MA
AST Technical Services BBS	(714)727-4723	Superb support system for AST Computer Products	AST Research Inc.	Irvine, CA
AT&T Support BBS	(908)769-6397	Support for PC 6300 and Other AT&T PC Models	American Telephone/Telegraph PC Division	
ATI Support BBS	(905)764-9404	Support for ATI Modems and Video Cards	ATI Technologies	Scarborough, ONTARIO
Atomic Cafe BBS	(713)530-8875	Home of Houston Area 713 BBS list, Connect Magazine	Connect Communications Co	HOuston, TX
Atomic Cafe BBS	(713)530-8875	Houston Area BBS list and Connect! Magazine	David Wachenschwanz	
Atri BBS	(903)758-2784	4 Gigs Online All Fidonet Message areas Over 200 door games	Walter Cade	Houston, TX
Attention to Details	(714)681-6221	Utilities/ASP/Patriquin Utils/Protocols	Clint Bradford	Longview, TX
Audiophile Network	(818)988-0452	High-end Audio Components, Music, Video Reviews	Guy Hickey/Quatre Speakers	Mira Loma, CA
Automobile Consumer Services	(513)624-0552	New Car Pricing Reports - Used Car Value Reports	Automobile Consumer Services Inc.	Van Nuys, CA
AviTechnic 1:261/662	(301)252-0717	Software Distribution System - BBS Utilities	Tom Hendricks	Cincinnati, OH
BBS America	(214)680-3406	Home of DFW Online Electronic Newsletter	Jay Gaines	Lutherville, MD
BCS BBS	(213)962-2902	Los Angeles' First Super BBS Under Development	Jim Lee	Richardson, TX
BCS IBM BBS	(617)964-2540	IBM PC Topics - TBBS Software (Internet)		Los Angeles, CA
BCS Info Center BBS	(617)621-0882	General Topics - TBBS - Internet Mail	Boston Computer Society/Martin Hannigan	Boston, MA
BCS Mac BBS	(617)864-0712	Macintosh Topics - Firstclass BBS Software	Boston Computer Society/Martin Hannigan	Boston, MA
Beach Board BBS 1:371/1	(813)337-4950	Over 100 online games - Internet Mail - 8 lines - 48000 fls	Boston Computer Society/Martin Hannigan	Boston, MA
Beyond Eternity	(310)371-3734	Home of EEEK! Bits - Weekly Electronic Trivia Magazine	Dave Ward	Fort Myers, FL
Beyond the Realm	(805)987-5506	200+ message areas 60+ file areas Fidonet VNet Adult Topics	J. Black/K. Taghadossi	Torrance, CA
BMUG BBS	(510)849-2684	Support for Macintosh owners - files - conferences.	Lee Ladisky	Camarillo, CA
Boardwatch Magazine Online Info	(303)973-4222	Distribution Service for USA Today/Boardwatch/Newsbytes	Berkeley Macintosh Users Group	Berkeley, CA
Book BBS	(215)657-6130	Information on 2000 Computer Books - 800 order number	Boardwatch Magazine	Littleton, CO
Book Stacks Unlimited	(216)694-5732		Business & Computer Book Store	Willow Grove, PA
Borland Download BBS	(408)431-5096	200,000 Book Titles Database - Online Ordering	Charles Stack	Cleveland, OH
Botnay Bay EIS	(603)431-7229	Utilities, Macros, Programming Examples for Borland Products	Borland International/Mike Fitz-Enz	Scotts Valley, CA
Boundary Waters BBS	(218)365-6907	20 GB of Files - Adult areas - BBS Lists	Myles Bratter	Portsmouth, NH
Bruce's Bar & Grill	(203)236-3761	Canoe Trips/Resorts/Fishing/Wilderness in Minnesota	Gary Knopp/InfoNorth	Ely, MN
Bryant Software		24-line Social System - Chat - Games - Downloads	Bruce Lomasky	West Hartford, CT
C.A.R.L Library Service	(303)733-0773	Support & Demo of Bryant Software & TBBS Products	Alan Bryant	Denver, CO
CAD/Engineering Service	(303)758-1551	Citations to 4 Million Texts in Colorado Library System FREE	Colorado Alliance of Research Libraries	Denver, CO
Canada Remote Systems	(615)822-2539	Computer Aided Design File Distribution Network 1:116/32	Stan Bimson	Hendersonville, TN
	(416)213-6003	23GB/400000+ files, 3500 Conf's, USENET, IBM/Amiga/Mac	Neil Fleming/Jud Newell	Mississauga, ONTARIO
Capital PC User's Group BBS	(301)738-9060	One of the oldest PC User's Groups - 5500 members	Capital PC Users Group/Roger Fajman	Rockville, MD
Castle Tabby 107/412	(908)988-0706	Home of TABBY Fidonet Interface Program for Apple Macintosh	Michael E. Connick	Bradley Beach, NJ
Caverns of the Abyss	(405)482-2980	4 Gigs Online CD Roms	Shannon Graham	Altus, OK
CBBS/Chicago	(312)545-8086	First Electronic Bulletin Board - Since 2/16/78	Ward Christensen/Randy Suess	Chicago, IL
CD Connection	(408)985-8982	90000 Compact Disks, Order Online (telnet:cdconnection.com)		

				DI LUIE II ME
Celebration Station	(207)667-0800	Adventure Games, Chat, and Sigs - Children	Noel Stookey (Paul of Peter, Paul & Mary)	Blue Hill Falls, ME
Central Point Software	(503)690-6650	PC Tools - Central Point Anti-virus support board	Central Point Software Inc.	Beaverton, OR
Channel 1	(617)354-8873	70-line PCBoard - 8 GB Files - Internet - 1000's msg. confs.	Brian Miller/Tess Heder	Cambridge, MA
Chicago SysLink	(708)795-4442	Special Interest Areas for Ferret/Pet Owners.TRS80/Aviation	George Matyaszek	Berwyn, IL
Chinet	(312)283-0559	UNIX System offering Internet Mail	Randy Suess	Chicago, IL
City Lites PCBoard	(701)772-5399	9 GB files, Rimenet, Internet, FidoNet, ASP, Online Orders	John Lundell	Grand Forks, ND
City Online	(909)860-Line	City Government BBS Rip/Internet & more	Troy Butzlaff	Diamond Bar, CA
Classified Connection BBS	(619)566-7347	Giffy Girls - Nude GIF Images of the Girl Next Door	Bill Kennon	San Diego, CA
Cleveland Freenet	(216)368-3888	Cleveland City Info/Public Library - Free Internet Mail Box	Case Western University/AT&T/Ohio Bell	Cleveland, OH
Cloud Nine	(713)855-4382	15 meg, 30 Nodes	Harold Lucas	Houston, TX
Colorado Connection	(303)423-9775	Breeding, Raising, Taming, Exotic Birds	Terry Rune/Dave McClauggage	Arvada, CO
Community News Service (CNS)	(719)520-5000	News and Entertainment - 17 Lines Community Focus	Klaus Dimmler	Colorado Springs, CO
Compact Audio Disk Exchange	(415)824-7603	Buy/Sell/Trade Compact Audio Disks Online	Wayne Gregori	San Francisco, CA
Computer Business Services	(714)396-0014	Book/Publishing Consultant Nick Anis' BBS	Nick Anis Jr.	Diamond Bar, CA
Computer Business Services	(909)396-0014	Book/Publishing Consultant John C. Dvorak & Nick Anis' BBS	Nick Anis Jr.	Diamond Bar, CA
Computer Garden	(301)546-1508	Treasure Hunting - Metal Detectors - Online Catalog	Milford P. Webster	Salisbury, MD
Computing Canada Online	(416)497-5263	Adjunct to Excellent Canadian PC Newspaper	Computing Canada Newspaper	Willowdale, ONTARIO
Crosstalk Communications BBS	(404)740-8428	Product Support for Crosstalk for Windows/MK4/XVI	Digital Communications Associates	Roswell, GA
Cul-de-Sac Bar & Grill	(508)429-1784	Multiline Service - Ham Radio - Humor - TDBS Applications	Pete White	Holliston, MA
CyberStore - a COCONET BBS	(604)526-3676	All lines to v.32bis/v.42/v.42bis. CyberTools for BBS'es	CyberStore Online Info. Systems Inc.	New Westminster, BC
DAK Online Resource Center	(818)715-7153	DAK Mail Order Catalog - Breakmakers - CD ROMS - Computers	DAK Industries/Tom Krogh	Canoga Park, CA
Dark Side of the Moon	(408)245-7726	Home of WAFFLE, Unix UUCP BBS Software for DOS and UNIX	Thomes E. Dell/Darkside International	Mountain View, CA
Data Bank	(913)842-7744	Information HQ, Support Board, Net-Mail & Files	Bob Oyler	Lawrence, KS
Data Core BBS	(310)842-6880	25 line Major BBS	Matthew Schoen/Delta Enterprises	Los Angeles, CA
DataLink RBBS System	(214)394-7438	Weather Satellite Imaging, NOAA Satellite Tracking-AMSAT-NA	Dallas Remote Imaging Group/Jeff Wallach	Carrollton, TX
Dawg*Star	(615)385-4268	ANSI Art Club 1:116/29	Kevin Snively	Nashville, TN
Deep Cove BBS	(604)536-5885	16 line TBBS, 3500 MBytes files for IBM, MAC, Amiga	Wayne Duval	White Rock, BC
DEMO Link	(303)220-0328	Free Demo Downloads of Quattro Pro/Lotus Magellan/More	BIX/Byte Magazine	PROFILE IL
Denver Exchange, The 104/909	(303)458-1227	28 Lines Adult BBS/Internet/Files/Chat/Games/Publications	James Craig	Denver, CO
Denver Free-Net	(303)270-4865	Free Community Online Service - Health Info	University of Colorado Health Science	Denver, CO
	(812)479-1310	Home of Tech Support BBS List, Online Magazines, 1.7 Gigs	Macin Galora	Evansville, IN
Digicom Distant Mirror BBS	(615)648-1782	Free Access BBS	Steve Perlo	Clarksville, TN
	(619)864-1468	Outstanding BBS Gateway to multiple information services	Mike Simmons	Palm Springs, CA
DNIS Duke Craphics of San Diogo	The same and the s	7 CD Roms Online, 4 gigs 50,000 files	Chris Duke	San Diego, CA
Duke Graphics of San Diego	(619)793-8360 (803)552-4389	Wildlife/Conservation Art Gallery GIF Images	Ambassador Wildlife Gallery/Bob Chapman	North Charleston, SC
EarthArt BBS		Vancouver School Board Multi-Line Educational Network	Barry Macdonald/Vancouver Board of Ed	Vancouver, BC
Ed-Net	(604)732-8877	Energy Efficiency Efforts In Pacific Northwest-HydroElec	Bonneville Power Administration WSE	Olympia, WA
Electric Ideas Clearinghouse	(206)586-6854		Brian Cash	Portland, OR
Electronic Publishers BBS	(503)624-4966	News-Finance-Sports-Games-2GB File Library	William R. Forbes	Indiana, PA
Electronic Zone, The	(412)349-3504	Specializing in Hypertext Variety of Petroleum/Coal/Electricity Energy Statistics	US Department of Energy	Washington, D.C.
Energy Info Admin E-Publications	(202)586-8658	The state of the s	Jim Maxey	Lake Oswego, OR
Entertainment & Graphics	(503)697-5100	Entertainment & Graphics	Phil Becker/eSoft Inc.	Aurora, CO
eSoft Product Support BBS	(303)699-8222	Home of The Bread Board System (TBBS) BBS Software		Lake Oswego, OR
Event Horizons	(503)697-5100	64 Line Digitized Graphics Image Library - Adult .GIF files	Jim Maxey Ron Olsen, Travis Hayes	Logan, UT
Everton's On-Line Search	(801)752-6095	Searchable genealogy databases with 3,000,000 ancestor names	Bob and Tracey Mahoney	Elm Grove, WI
EXEC-PC	(414)789-4210	Largest BBS in US - 280 Lines -650,000 files - 35 Gigabytes		Mt. Vernon, NY
Executive Network	(914)667-4567	Interlink Netmail National Host - Multiline PCBoard System	Andy Keeves	Mill Valley, CA
Eye Contact BBS	(415)255-5972	22 line Oracomm - Gay Issues - Popular Chat System	Bill Montgomery	Orlando, FL
FAA Flight Standards ASO-FSDO-15	(800)645-3736	FAA Flight Standards Publication & Info for the Aviation Com	FAA/Bill Hoenstine	Woodbridge, VA
Falken Support BBS	(703)803-8000	Support for FALKEN software - 16 lines - doors - chat	Herb Rose	Victoria, BC
Farwest BBS	(604)381-3934	Large Western Canada Galacticomm Info System	Ren L'Ecuyer	San Diego, CA
FAX/Satellite Services BBS	(619)224-3853	NOAA Weather Satellite Images - Russian/Japanese Sat Pics	Scotty Olson	Columbia, MD
FCC Public Access Link	(301)725-1072	Equipment Authorization Status Advisory Service	Federal Communications Commission	
FCC WORLD	(202)887-5718	FCC Documents, Forums	Smithwick & Belendiuk, P.C.	Washington, D.C.
FEDLINK ALIX II	(202)707-4888	Info on Federal Libraries -Excerpts Library of Congress News	Federal Library Information Network	
Fido Tech Stand	31-30-735900	Fidonet Technical Information for Holland	J.J. van der Maas	Utrecht, HOLLAND

BOARDWATCH MAGAZINE

NATIONAL LIST OF ELECTRONIC BULLETIN BOARDS AND ONLINE INFORMATION SERVICES - October 1994

SERVICE	PHONE	DESCRIPTION	SPONSOR/SYSOP	LOCATION
Fire & Ice	(313)373-8608	A Family BBS With Christians Discussions	William Sims	Drayton Plains, MI
Fisherman's Net	(614)837-0400	Dedicated to Fisherman	Lloyd Davidson	Carroll, OH
FOG City BBS 125/10	(415)863-9697	Gay Community BBS - AIDS Info - Desktop Publishing - MACs	Bill Essex	San Francisco, CA
Foundation Online Service	(203)968-8752	15+ Gigs 8 Lines Internet	David Deutsch	Stanford, CT
Fred the Computer	(508)872-8461	Newspaper BBS. Wierdnet Newswire. List of MA Libraries	Middlesex News-Adam Gaffin	Framingham, MA
FreeBoard BBS, The	(804)744-0797	Desktop Publishing File Distribution Network 1:264/212	Bill Hunter	Midlothian, VA
Fun Connection	(503)753-8431	Multiline Entertainment - 8 Lines Games/Chat/News	Vincent Reece	Corvallis, OR
Galacticomm Demo System	(305)583-7808	Customer support for Major BBS	Galacticomm	Fort Lauderdale, FL-
Garbage Dump	(505)294-5675	Hottest Chat in America - National Access \$1.75 per Hour	Dean Kerl & Simon Clement	Albquerque, NM
Gateway Communications BBS	(714)863-7097	Novell Netware/TCP-IP Shareware Utilities	Carol De Jesus	Irvine, CA
Gateway On-Line	(313)291-5571	Interactive Chat, MulitiplayerGames, Usenet/Internet, E-mail	Jeff Breitner/Bill Mullen	Rockwood, MI
GDP Technologies	(303)673-9470	Outstanding IBM Shareware on a small system	Tom Getty's	Lafavette, CO
General. The	(619)281-8616	Popular File Library - GIF Images	Marc Teitler	San Diego, CA
GISnet BBS	(303)447-0927	Graphics Information Systems/Mapping topics	Bill Thoen	Boulder, CO
GLIB	(703)578-4542	Gay and Lesbian Information Bureau - 11 Lines - 9600 bps	Community Educational Svcs. Foundation	Arlington, VA
GPO WINDO Online Service	(202)512-1387	Fed Information from EPA, DOE, State Department - others.	US Government Printing Office	Washington, DC
Greenpeace Environet	(415)512-9108	Ecological and Peace Issues - Disarmament/Toxics/Wildlife	Dick Dillman/Greenpeace	San Francisco, CA
Hackers R Us Online	(602)945-8416	Online Games, Files & Tech Discussions	David Ray	Scottsdale, AZ
Hackers World BBS	(309)672-4405	Adult Files, Fidonet Echo-Mail Adult-net	Martin Belcke	Peoria, IL
Harris City Medical BBS	(713)790-1093	Medical Information	Monica Faulk	Houston, TX
Hayes Advanced Systems Support	(800)874-2937	Customer Support Line for Hayes Customers. V-series/Ultra	Hayes Microcomputer Products	Norcross, GA
Heartland Free-net	(309)674-1100	Community Online Service - Free Internet E-Mail Boxes	Peoria County Board/Bradley University	The state of the s
Herpnet/Satronics TBBS	(215)698-1905	Reptile and Amphibian Studies - Poison Snakes/Toads/Fish	Mark Miller	Peoria, IL
HH Info-Net BBS	(203)246-3747	MS Windows and OS/2 Files our specialty	Lee Winsor	Philadelphia, PA
HoloNet	(510)704-1058	National Access, INTERNET, USENET, CHAT, GIFS, FILES	Information Access Technologies, Inc.	New Hartford, CT
HouseNet BBS	(410)745-2037	Home Fixup/Repair/Renovation Tips, Advice, and Articles	Gene and Katie Hamilton	Berkeley, CA
Howard's Notebook 1:280/25	(816)331-5868	Environmental, Peace, Justice since 1982 - 4 nodes	Jim Howard	St. Michaels, MD
Hysterics	(613)231-7144	Amiga File Distribution Network 1:163/109	Russell McOrmond	Kansas City, MO
IBM National Support Center BBS	(404)835-5300	IBM PC User Groups Database - Newsletter Exchange		Ottawa, Ontario,
Inbound/Outbound/Teleconnect	(212)989-4675	Telephone Sales Trade Magazine Online Service	IBM National Support Center	Atlanta, GA
Infinite Space Online	(407)856-0021	32 Line Interactive Chat & Games Majornet	Harry Newton Publications Charlie Scherker	New York, NY
InfoHost Demo BBS	(201)335-2253	Demo BBS for InfoHost BBS Software - Multiline - Database		Orlando, FL
Inns of Court. The	(214)458-2620	LAN Related Files and Utilities 1:124/6101	A-Comm Electronics Inc.	Hasbrouch Heights, NJ
Intel PCEO Support BBS	(503)645-6275	Support for Intel PC Products - Inboard 386/AboveBoard 286	Arthur Geffen	Dallas, TX
Inter Comm	(702)359-2666	6 Line 5.5 Gig 30,000 Files	Intel Corporation PCEO Division	Hillsborough, OR
InterMail Tech Support BBS	(305)436-1884	Home of InterMail, Front End Mailer for FidoNet 1:369/102	Roger Brown	Spark, NV
Invention Factory	(212)274-8110	46 Lines - 100 Directories - Full Usenet Feed - 8.2 GB	Patrik Bertilsson	Hollywood, FL
Investor's Online Data	(206)285-5359		Mike Sussell	New York, NY
JDR Microdevices BBS	(408)494-1430	Online Investment/Stock Market Information/Tech Analysis	Don Shepherdson	Bellevue, WA
JOBBS	(404)992-8937	Online Hardware Order - Catalog - 1.1 GB Files - Quizzes Online Job Listings - 2186 Technical Pos 10,000 Corps.	JDR Microdevices	San Jose, CA
Keith Graham Shareware Support	(914)623-0039	OPTIK, TEXT2COM, CBOOT, very good shareware utilities	Alpha Systems Inc./Bill Griffin	Roswell, GA
KIMBERELY BBS	(612)340-2489		Keith P. Graham	Nyack, NY
King's Market BBS 104/115	(303)665-6091	Prime Rate-Fed Funds-T-Bill-Discount Rate-Economic Data	Federal Reserve Bank of Minneapolis	Minneapolis, MN
Knight Vision BBS	(213)344-3600	400 MB Books, Writers Area - TRS 80 Support	Jim and Karen Burt	Boulder, CO
Lace's Place	(718)822-3552	Chess and Backgammon - 8 lines - "Intelligent Entertainment"	Matthew Beelby	Pasadena, CA
LANtastic BBS	The second secon	Female Domination Adult BBS online since 7/91	Ellen Grogan	New York City, NY
	(602)293-8065	Support for LANtastic local area network	Artisoft Inc.	Tucson, AZ
Late Night Software 125/555	(415)695-0759	Home of UFGATE - Software to connect PCs to UUCP/Usenet	Tim Pozar	San Francisco, CA
LegalEase LICA Limbs BBS	(509)326-3238	Legal issues/Forms - Law BBS List	Bill Sorcinelli	Spokane, WA
LIOA LIIIUS DDS	(516)561-6590	Member written software PC Board 15.0 USR HST Since 1980	Dave Minott	Valley Stream, NY

Lincoln Cabin BBS	(415)752-4490	General Interests & Rime	Steve Pomerantz	San Francisco, CA
MAC-LINK	(514)486-8959	Macintosh Oriented Support BBS - 6 Lines - Infomat/BIX	Mark Smith	Montreal, QUEBEC
Macalot Bulletin Board	(412)846-5312	Support for Second Sight BBS Software for Macintosh	Jeff Dripps/FreeSoft Company	Beaver Falls, PA
MacCircles	(303)526-2219	Mac System Software distributor, mail, sigs, files	Patricia O'Connor	Golden, CO
MacInternational	(803)798-3755	Macintosh support since April '85. FirstClass BBS	Ralph Yount	Columbia, SC
Magpie BBS	(212)420-0527	Support/Demo System for Magpie BBS/Conferencing Software	Steve Manes	New York, NY
MaxiHost Support BBS	(209)836-2402	MaxiHost BBS - small, very easy to run BBS	Don Mankin	San Ramon, CA
Mayan Antiquities	(214)691-1316	Mayan Culture and Antiquities	Ron Whipple	Dallas, TX
McAfee Associates BBS	(408)988-4004	Computer Virus Information - VIRUSCAN and CLEANUP	John McAfee/CVIA	Santa Clara, CA
Med Technet	(716)688-1552	Educational research for Clinical Laboratory professionals	Bill Hliwa	East Amherst, NY
Medi-Call BBS	(818)330-1739	Active 2 lines PubSvc w/ 120 netmail confs., & GIGs of Files	Gordon Huyck	La Puenet, CA
Meeting Works, The	(212)737-6932	Meeting/seminar/convention planning information.	John Mackenzie	New York, NY
METRO Online Entertainment	(212)831-9280	32 line DLX with City Guide/Ski Database - Matchmaker - Chat	Bruce Kamm/Metro Online Services	New York City, NY
Micro Foundry, The	(415)598-0398	2.2 GB Downloads - Your Online Software Source - Boardwatch	Thomas Nelson/Clockwork Software	San Jose, CA
Micro Message Service	(919)779-6674	USA Today/Boxoffice Magazine - Large Download Area	Mike Stroud	Raleigh, NC
Microrim Technical Support BBS	(206)649-9836	Support for Popular R:Base Relational Data Base System	Microrim Corporation	Redmond, WA
Microsoft Download BBS	(206)936-6735	Windows Technical Notes and Support Information	Microsoft Corp/Scott J. Honaker	Bellevue, WA
Microsystems Software Inc.	(508)875-8009	HandiWare Software for Handicapped - CodeRunner C Utilities	MSI - Reed Lewis	Framingham, MA
MindVox	(212)989-4141	Internet Access, E-Mail, Newsgroups, ftp/telnet	Phantom Access Technologies	New York, NY
Minnesota Space Frontier	(612)459-0892	Minnesota Space Frontier Society - NASA News	Ben Husset	Minneapolis, MN
MOG-UR'S EMS, The	(818)366-1238	5 Lines - 8 Networks CD-ROMS - 2.8 GB Hub Services HST/V.32	Tom Tcimpidis	Granada Hills, CA
Monterey Gaming System	(408)655-5555	A Custom Multi-user BBS with Conferencing and Custom Games	David Janakes	Monterey, CA
Mountain Air BBS	(703)427-0226	Adult Based BBS	Edward Lee Wood, Jr.	Roanoke, VA
Movie BBS	(718)939-5462	Movie Reviews and Information - Television	Clarke Ulmer	New York, NY
Mustang Software	(805)873-2400	Support for Mustang Software Products	MSI Sysop	Bakersfield, CA
N.A.C.D. BBS	(912)246-3280	Cave Scuba Diving - Superb Special Topic System	National Assoc. of Cave Divers	Gainsville, FL
N8EMR Ham BBS	(614)895-2553	login:hbbs HAM Radio/AMSAT Unix System - Satellite/Packet	Gary Sanders	Westerville, OH
Namu BBS	(913)273-1550	Amateur Radio Interests	Rob Nall	Topeka, KS
NAPLPS Graphics BBS	(613)727-5272	NAPLPS Graphics Terminal and Editor Software	MicroStar Corp.	Nepean, ONTARIO
NASA Spacelink	(205)895-0028	NASA Educational Affairs Div Flight Data/Space History	Marshall Space Flight Center	Huntsville, AL
Nashville Exchange	(615)383-0727	12 line TBBS - Games/TDBS Software Development 1.8 GB	Ben Cunningham	Nashville, TN
National Genealogical BBS	(703)528-2612	Family History - Genealogical Research - Gravestone Haunting	National Genealogical Society	Arlington, VA
Netcom Internet Guest System	(408)241-9760	Internet Access System - type "guest" at login for info.	Netcom Online Communications Services	San Jose, CA
Network World Bulletin Board	(508)620-1178	LAN and WAN Issues and Technology	Network World Magazine	Framingham, MA
Newbed	(506)453-2147	Educational System K12 Net	William Brydges	Fredeeriction, NB
Newtown Express BBS	(215)943-6806	14.5 Gigs/700+Sigs 18 Lines Large Adult Section USA Today	Anthony Maglietta	Newton, PA
Night Shift, The	(818)955-5155	16 lines/chat/Usenet Newsgroups/Internet Mail/USATODAY	Charles Hilt	Burbank, CA
NIST ACTS	(303)494-4775	Automated Computer Telephone Service - Sync PC to NBS Time	Nat. Institute for Standards/Technology	Boulder, CO
NOAA Space Environment Lab	(303)497-5042	Solar Flare/Geomagnetic Data Online	National Oceanographic/Atmospheric Admin	
NoGate Consulting	(616)530-3392	Home of PAK archive utility	Mike Neuhaus Gus Smedstad	Grand Rapids, MI
North Castle BBS	(507)281-8292	Minnesotas #1 RPG BBS	Rob Richter	Rochester, MN
O&E Online	(313)591-0903	Free Community BBS, Editorial Text from Newspapers	Greg Day	Livonia, MI
	(919)541-5742	Air Quality Planning and Standards Technology Transfer Net	Environmental Protection Agency	Research Triangle Park, NC
OAQPSTTN OASIS BBS	(404)627-2662	Home of Atlanta Bulletin Board List - ABBL	Robert Orr/Online Atlanta Society	Decatur, GA
		Job Safety Issues for Artists, Musicians, Entertainers	Mike McCann/Center for Safety in Arts	New York, NY
Occupational Health/Safety BBS	(212)385-2034 (818)358-6968	Largest Adult Based Entertainment Service In North America	Michael Allen	Monrovia, CA
ODYSSEY		Adult Multiline Chat System - Games - Magazines - Downloads	Michael Allen	Monrovia, CA
Odyssey	(818)358-6968	Educational Statistics and Data - Performance Stats -	US Department of Education	Washington, D.C.
OERI BBS		Political Discussions - Unix UUCP Public Access - Multiline	Dave Hughes	Colorado Springs, CO
Old Colorado City Communications	(719)632-4111	Canada's shareware house is online now	Gary Walsh/Tom Haavisto	Thunder Bay, ONTARIO
Online Now	(807)345-5522	Hayes Public Bulletin Board - Conferences/SIGS/Support	Hayes Microcomputer Products	Norcross, GA
Online With Hayes	(404)446-6336	South Australian TBBS Multiline System	Don Crago	Pooraka South Australia,
Oracle PC	6108 260-6222	Sales and Support for Oracomm Multiline BBS Software	Surf Computer Services	Minneapolis, MN
Oracomm Support BBS	(612)894-5879		Fran and Norm Saunders	Colesville, MD
Osprey's Nest	(301)989-9036	Birdwatching, Bird feeding, Naturalist/Ecology Issues	Mike Mathews	New Orleans, LA
Ozone Hole, The	(504)891-3142	Boardwatch-USA Today-Internet-Usenet-RIME Home of THE LIST National BBS List	James Toro	Hicksville, NY
P.D.S.L.O. BBS	(516)938-6722			THOROTON TO
		Copyright 1994, Jack Rickard - All Rights	s keservea	

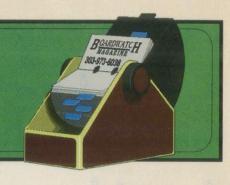
BOARDWATCH MAGAZINE

NATIONAL LIST OF ELECTRONIC BULLETIN BOARDS AND ONLINE INFORMATION SERVICES - October 1994

SERVICE	PHONE	DESCRIPTION	SPONSOR/SYSOP	LOCATION
PacComm BBS	(813)874-3078	Packet Radio Equipment Supplier - TNC/PSK Modems	Gwyn Reedy/PacCom Inc.	Tampa, FL
PC Junction BBS	(615)478-2890	Smartnet Throbnet 100,000 Files & Online Magazines	Douglas Carpenter	Cleveland, TN
PC-Ohio	(216)381-3320	Shareware library with 100% USR HST access - 50 lines	Norm Henke	Cleveland, OH
Pennywise	(800)752-3012	Online Office Supply Sales Service	Pennywise	Edmonston, MD
PHYSICS Forum BBS	(413)545-1959	Physics and Astronomical Sciences	Univ.of Mass. Dept. of Physics/Astronomy	Amherst, MA
Pinecliffe BBS 104/28	(303)642-7463	Large Shareware Library/Echomail Conferences since 1985	Craig Baker	Pinecliffe, CO
Pinnacle Software BBS	(514)345-8654	Support for Sapphire BBS Software	Timothy Campbell/Pinnacle Software	Montreal, QUEBEC
Pipeline, The	(209)592-9861	Construction topics for contractors, suppliers, public works	Michael W. Adams	Fresno, CA
PKWare BBS	(414)354-8670	Home of PKZIP 1.10 Compression Utility	Phil Katz/PKWare Incorporated	Glendale, WI
Pleasure Dome	(804)490-5878	Sexually Explicit Fantasy Chat System - Adults only	Tom Terrific	Tidewater, VA
Practical Peripherals BBS	(805)496-4445	Support BBS for Practical Peripherals Modems	Practical Peripherals	West Lake Village, CA
ProComm Support BBS	(314)875-0503	Home of ProComm 2.4.3 and ProComm Plus Comm Prgrms	Thomas Smith/DataStorm Technologies Inc.	
Promised Land, The	(715)387-1339	16-Line/2.5GB/11,000+ Files/ WINDOWS, Chat & More	Tim Brown/Computer Solutions	Marshfield, WI
Public Brand Software BBS	(317)856-2087	Commercial Shareware Vendor	Public Brand Software	Indianapolis, IN
Public Connection	(817)738-7336	Public Files	Joe Coles	Ft Worth, TX
QMail Deluxe Support BBS	(615)230-8822	Support for QMail Deluxe and 1stReader offline mail utils	Mark (Sparky) Herring	Germantown, TN
Qualitas, Inc. BBS	(301)907-8030	386MAX and BlueMAX Memory Management Software Support	Qualitas Inc.	Bethesda, MD
Quarterdeck BBS	(310)314-3227	Technical Support for QEMM, DESQview, all Quarterdeck Prods	Quarterdeck Office Systems	Santa Monica, CA
QuickBBS Support BBS 363/34	(407)896-0494	Product Support for QuickBBS Software	Richard Creighton/Steve Gabrilowitz	Orlando, FL
Random Access Information Svc.	(503)695-3250	11,000 GIF Images - 20,000 DOS/Windows Shareware Files	Janice Stevens	Corbett, OR
RoboBOARD/FX	(819)682-7771	RoboBOARD Support 8 Lines	Hamilton TeleGraphics Inc.	Aylmer, PQ
Ronin BBS	(214)938-2840	Traditional File and Message BBS	Chuck Mattern	Red Oak, TX
Rose Media	(416)733-2780	19 GB - Home of Rosemail - Publications/Conferences	Vic Kass	Willowdale, ONTARIO
Rusty & Edies	(216)726-0737	Large ML PCBoard run by Husband and Wife - NFL/Tradewars	Rusty and Edwina Hardenburgh	Boardman, OH
Sahara Club BBS	(818)893-1899	Land-Use issues, Off-Road, Timber, Conservation	Patrick Martin/Sahara Club	North Hills, CA
Salt Air BBS	(801)261-8976	Home of PCBoard BBS Software - National List of PCB Sys	Clark Development Company/David Terry	Murray, UT
San Diego NeXT User's Group BBS	(619)456-2522	Support for NeXT Computers	Brian Dear/San Diego NeXT User's Group	San Diego, CA
SBA Online	(800)697-4636	Advice for Small Business Owners on Financing/Management	Small Business Administration	Washington, DC
Science Resource Studies BBS	(202)634-1764	Federal R&D Budget - Technical Labor Market Statistics	National Science Foundation	Washington, D.C.
SDN Project, The 1:141/840	(203)634-0370	The Original Software Distribution Network	Ray Kaliss	Meriden, CT
SEAboard!	(804)442-6047	Support system for ARC, SEADOG, and AXE software.	System Enhancement Associates	Nassawadox, VA
Seagate Technical Support BBS	(408)438-8771	Installation and Specifications for Hard Drive Models	Seagate/Bill Rudok	Scotts Valley, CA
Searchlight BBS	(216)631-9285	Support system for Searchlight BBS Software	Searchlight Software	Cleveland, OH
SemWare Support BBS	(404)641-8968	Home of QEdit - A Superb Shareware Text Editor	Sammy Mitchell/SemWare Software Product	The state of the s
SENDIT	(701)237-3283	North Dakota K-12 Educational Net-telnet sendit nodak edu	Gleason Sackman/NDU	Fargo, ND
SIGCAT BBS	(703)648-4168	CD-ROM /Optical Publishing Info - Lists of Gov. CD Data	SIG on CD-ROM Applications and Technol.	Gathersburg, MD
Sistema Profesional Informacion	(525)590-5988	Largest BBS in Mexico - Spanish Language TBBS	Tecnologia Uno Cero S.A. de C.V.	Mexico City,
Skeleton Closet, The	(804)671-8547	Geneology Programs File Distribution Net 1:271/23	Debbi McKay	Virginia Beach, VA
Society for Technical Comm. BBS	(703)522-3299	STC Job Service, Freelance Registry - Technical Writers	Society for Technical Communication	Washington, D.C.
Software Creations BBS	(508)368-4137	Home of Apogee Software/Commander Keen Series	Dan Linton	Clinton, MA
Sound Advice BBS	(816)436-4516	Twenty Line PCBoard with 2 Gigabytes Storage - HST Modems	Roy Timberman	Gladstone, MO
Source for Source. The	(516)968-7824	Source code - large LINUX file collection	Erik VanRiper	Bay Shore, NY
Space BBS	(415)323-4193	Multi Node BBS for Engineers	Owen Hawkins	Menlo Park, CA
Spark*Net	(718)447-5544	Internet E-Mail, Worldlink, Chat, Games, Forums, Files	John Spark	
Spectrum Online Systems	(719)576-6853	Graphics Based Service, Full Internet Access		New York City, NY
Star Tech BBS	(714)257-1175	LA/Orange local acess Fidonet hub, file echos, and internet	Chris Phillips David Unfried	Colorado Springs, CO
Star-Link Network BBS	(718)972-6099	9-nodes, 2.1GB, Ilink, 75,000 programs		Orange County, CA
Starlink BBS	(915)235-4818	Technical Support for Predictive Maint Customers	Michael Keylin John Land	Brooklyn, NY
StarLink Information Services	(502)964-7827	Online Travel Service. Internet Movie Reviews & Weather	Scott Goldbach	Sweetwater, TX
C.G. Z.III. IIII GIIII GGI VIGGO	(002)004-1021	Chillie Travel del vice, internet iviovie Neviews & vvedtilei	GCOIL GOIDDACT	Louisville, KY

State and Legal Emergency Mamt	(202)646-2887	Hazardous Materials/National Dam Watch/Emergency Info	Federal Emergency Management Agency	Washington, D.C.
State and Local Emergency Mgmt.	(718)349-8137	Connecton to the World of New York Book Publishing	BookStreame	Brooklyn, NY
Streame	(801)774-6509	Software Engineering, Government & Software Organizations	George A. Klipper	Hill AFB, UT
STSC BBS	(208)726-1435	Information & Files on environment & outdoors	Stephen Schowengert	Ketchum, ID
Sun Valley Net	(305)370-9376	Online Democracy/Political Culture for the Future	Tim Stryker	Davie, FL
Superdemocracy Foundation BBS	(403)246-4487	3.6 Gigs, 4 CD Roms 7,000 GIFS 20,000 Shareware Programs	Brian Simpson	Calgary, AB
T-80 BBS	(716)896-7581	Botany, Herbaria, FLORA ONLINE Newsletter, Latin Translation	Clinton Herbarium, Buffalo Museum	Buffalo, NY
TAXACOM TEAMATA Unix Bulletin Board	(310)318-5302	Demo/Support for TEAMate BBS Software for Unix	Bob Baskerville/MMB Development Corp.	Manhattan Beach, CA
TEAMate Unix Bulletin Board		Support for Telebit Modems	Telebit Corp.	Sunnyvale, CA
Telebit Support BBS	(408)745-3229 (503)621-3746	Home of ZModem File Transfer Protocol/YModem/YAM	Chuck Forsberg/Omen Technology Incorp.	Portland, OR
Telegodzilla	(415)358-8641	DBMS/Dr. Dobbs Journal Magazine Online Service	M&T Publishing	Redwood City, CA
Telepath		Support Service for Telix Communications Software	Jeff Woods/deltaComm Development	Cary, NC
Telix Support BBS	(919)481-9399	America's Largest Exclusively Gay DB - Home of Gaycomm	Fred Kohn	Richmond Hill, NY
The Back Room	(718)849-1614	Business Related Files & Info	Doug Rowan	San Diego, CA
The Business BBS	(619)576-0049		Terry Dawe	Marine City, MI
The Chef! BBS	(810)765-2966	Online recipes and more ADA, OSHA, RTN, 18 CD Roms Online & 30+ Games	George Porcella	Cranford, NJ
The Club House BBS	(908)272-2073	Family Oriented BBS Files, Conferences and Online Games	David Lane	Port St Lucie, FL
The Eastside BBS	(407)337-1274	Local Online Message and Info Provider, Rime Node	Dick Wolff	Wapa, CA
The Electronic Grapevine	(707)257-2338		Girard Westerberg/Brian Bartee	Littleton, CO
The File Bank	(303)534-4646	16 Line File Library - Radio Comm/Astronomy - USA Today	Larry Reeves	Murfreesboro, TN
The Hot Heart of Tennessee	(615)890-8715	Home of hot programs, supports PC, Amiga	Rodney Aloia	Atlanta, GA
The INDEX System	(404)924-8472	Excellent list of Atlanta BBS systems online	Joseph Sheppard	Tujunga, CA
The Ledge PCBoard	(818)896-4015	Home of Textview Door for PCBoard Systems	John Galt	Anaheim Hills, CA
The Liberty BBS	(714)996-7777	Nation wide Chat, E-Mail, Forums, games, CD-Roms, Online News	ADA, National Tech. Search/Eric Davis	Amherst, MA
The New Professional Network BBS	(413)549-8136	Hundreds of software and is job openings nationwide, FREE	KW Wroblewski	Hoffman Estates, IL
The Opowd Crowd	(708)885-8865	Specializing in outdoor activities and sports		Harrisburg, PA
The Other BBS 1:1/0	(717)657-2223	Fidonet Zone Coordinator for North America 1:1/0	George Peace	Sausalito, CA
The Well	(415)332-6106	Unix Conferencing System - \$15 monthly plus \$2 Hourly	Whole Earth Lectronic Link	Falmouth, VA
Thunderbolt BBS	(703)373-9289	Various Files & Message Areas	John Schreiber	Berkeley, CA
Tiger Team Buddhist Info Network	(510)268-0102	America's Buddhist Online Service	Gary L. Ray	Pensacola, FL
Titan BBS	(904)476-1270	Adult BBS - Online Games - GIF Images	Clayton Manson	San Fernando, CA
Tool Shop BBS	(818)891-6780	Home of HS-Link and other tools for PCBoard Systems	Sam Smith	Washington, DC
Town Hall	(800)441-4142	Conservative Political Conference and Debate	National Review/Heritage Foundation	
Traders Connection	(317)359-5199	Online System for Classified Advertisements	Carson Hanrahan	Indiannapolis, IN Exeter Devon, U.K.
Trinity 1 BBS	44 392 410210	United Kingdom Distributor of Boardwatch Magazine	John Burden	
TurBoard	(404)395-6327	NAPLPS Graphics BBS System	Software@work	Chattanooga, TN
U.F.O. BBS	(408)847-7910	Out of this world file base	Phil Intravia	Gilroy, CA
U.S. Robotics - Sit UBU Sit	(708)982-5092	Support for US Robotics HST 9600 bps Modems	U.S. Robotics Corporation	Skokie, IL
US Naval Observatory BBS	(202)653-1079	Time - Date - Sunrise - Sunset - Enter @TCO for Commands	US Department of Commerce US Naval Obser	Washington, D.C.
USDOE BBS	(202)260-9950	Currently available grants and contracts for Education	U.S. Dept. of Education/George Wagner	Washington D.C.,
USGS Quick Epicenter Determin.	(303)273-8672	Earthquake Epicenter Data - Geomagnetism7E2 800-358-2663	US Geological Survey Earthquake Info Cnt	Denver, CO
USNO Time of Day for Clocks	(202)653-0351	Xmits ASCII Time String - Sync Your PC to USNO Atomic Clock	US Naval Observatory	Washington, D.C.
UT Library Online Catalog	(512)471-9420	Online Library Card Catalog Listing 3.5 million entries	University of Texas at Austin	Austin, TX
WeatherBank	(800)827-2727	Online Weather Forecasts for Any City - Download Radar Data	Steve Root/WeatherBrief Data Services	Salt Lake City, UT
Western Digital Tech Support	(714)753-1068	Hard Drive/Controller Installation and Config Data	Western Digital Corporation	Irvine, CA
Westside, The	(213)933-4050	Area's Largest/Most Active Adult System-Chat, E-mail, Games,	Dave Harrison	Los Angeles, CA
Wildcat HQ BBS 210/12	(805)873-2400	Multiline Support System for Wildcat BBS Software	MSI - Mustang Software, Inc.	Bakersfield, CA
Windsor Manor	(203)688-4973	Over 120 Online games Tabs Subscription Running VBBS	Jim Taylor	Windsor, CT
Wizard's Gate, The	(614)224-1635	Multi-Line Totally Free BBS-Multi Player Games, Files, Message	Joseph G. Balshone	Columbus, OH
Word Perfect Customer Support	(801)225-4444	Word Perfect 4.2/5.0/5.1 Support/Printer Drivers	Word Perfect Corporation	Orem, UT
Worldview BBS	(510)676-2919	Reformed Protestant Topics; Telefinder Host	Bill Gram-Reefer	Concord, CA
WWIV Support BBS	(310)208-6689	Support for WWIV BBS Software	Wayne Bell	Rolling Hills Estates, CA
XTree BBS	(805)546-9150	Support for XTree Pro Gold DOS Shell Program	XTree Company	San Luis Obispo, CA
XyQuest Support BBS	(508)667-5669	Support for XyWrite Word Processor - Custom Keyboard Files	XyQuest Inc Christine Madsen	Bellerica, MA
Yellow Dream Machine BBS	(512)451-3222	Disability Rights Issues - Variety of Disability Newsletters	Bill Scarborough/Cyanosis Rex	Austin, TX
Z/Max XChange UNIX BBS	(315)635-1947	Demo/online support for XChange UNIX BBS	Z/Max Computer Solutions, Inc.	Baldwinsville, NY
the state of the s				

BOARDWATCH MAGAZINE Advertisers



ADP Autonet	107
Affinity Fund	
Allmedia Data Services, Inc	140
Anterra, Inc	
APDI	
Aquila BBS	
Arizona Mac Users	
Arsenal Computer	
B-3 Corporation	
Baylor Instruments and Technologies, Inc	
BBS Technologies	28
BFP Communications.	
Bryant Software	
Business BBS, The	
Byte Runner	
CD Archive, Inc	
CDS	
Clark Development, Inc	53
Classified Connection	
Clearlight Software	
Connections BBS	
Dallas Remote Imaging Group	
Team Darkstar	
DataSafe Publications, Inc	
Delphi - General Videotex	
deltaComm Development	
DFW Electronics	
Digicom Systems, Inc	
Digital Dynamics	
Digital Universe	
DSC	
Durand Communications	
EC Computer Services, Inc	
Electronic Frontier Foundation	
EMS Professional Shareware	
Equinox Systems, Inc	
Erotica East	
eSoft, Inc	
Event Horizons	
Exec-PC	
Fantasy Land Computer Services	
Fashion World	
File Shop	
First Link Telephone	
Galacticomm, Inc	
GTEK	
GW Associates	
Higher Technology Services	

Hustler Online	9
IAN, Inc	
Imagen, Inc	
INDEX System, The	
Infolink	
Information Access Technologies, Inc	7
Integrated Solutions\Online Services 28, 36	, 94, 10
JBX Designs, Inc.	14
Logicom, Inc	
Marketing Solutions	
MCI PC Connect	
Media House Software, Inc	
Midwest BBS	
Mike Robinson Software	130
MMB Development	6
Modern BBS	94
MurkWorks	
Mustang Software, Inc2	
NetManage	8'
Online Systems	
Online Technologies	
Page Sat, Inc.	
Pimp	
Planet Systems, Inc	
Prodigy	
Profit Group	
Public Data Network	
QCOM	
Resource Link	
S&H Computer Systems, Inc	
Searchlight Software	
Software Agents, Inc	
Starship Enterprises	
Summit Software Services	
Summitview Enterprises	
Supra Corporation	
Tavern BBS Tele-Net Online	
Teleflora Telegrafix Communications, Inc	150
The Icebox BBS Time Online Connection	
Time Online Connection	
Trader's Connection	
True Media	
UNI-ROM	
VHBG	
7VFI	140

Put a SuprafaxModem™ 288 on your BBS for as little as \$149.95!

In the real-world of less-than-perfect phone lines, the SupraFAXModem 288 outperforms the competition. Just look at the reviews. The SupraFAXModem 288 allows you to service more callers by getting them on- and off-line faster. Plus, Supra offers special pricing to qualified BBS operators. For a surprisingly low price you get Supra's top-of-the-line feature set including: adaptive answer for data and fax line sharing, Flash ROM for quick field upgrades, Caller ID for identifying and tracking your BBS users, Supra's five-year limited warranty and an economical upgrade to V.34. To order, or for more information about the SupraFAXModem 288, sign on to the Supra BBS at 503-967-2444, or call Supra at 1-800-727-8772 today!







FAST Trademark of Rockwell International Corporation.

Specifications subject to change. All trademarks belong to their respective companies.

7101 SUPRA DRIVE SW • ALBANY, OR 97321 USA • PHONE: 503-967-2410 • FAX: 503-967-2401 • SUPRA GmbH • CARL-FRIEDRICH GAUSS STRASSE 7 • D-5024 PULHEIM BRAUWEILER • GERMANY • PHONE: 49-22-34-98590



"Its ability to plug-away through poor line conditions puts it in a whole new league." Computer Shopper, July 1994

1st Place — PC Computing, "Great bundle with bargain price—our winner was a favorite with testers." June 1994.

★★★★ — MACWORLD, "Supra is paving the way for life in the fast lane." August 1994.



You started out to build a multi-user BBS. You had dreams about the service your system would provide, the problems you would solve and the money you would make. But you didn't bargain for the pile of hardware you would live with every day and now it controls your life.

As you compared the prices of software you missed the fact that the design philosophy of most BBS software forces many hardware decisions on you. ONLY TBBS allows you to achieve high performance with 64 high speed lines on a single CPU with NO custom hardware. And only TBBS gives you the option of integrated xBASE databasing with the TDBS expansion module and compiler.

True freedom is the ability to spend vour time as you wish. Talk to real multi-user BBS sysops. You'll notice that only TBBS operators talk first about ideas, not hardware and software. For over ten years TBBS has provided them the freedom to design custom systems they can live with.

No one gets more capability with less impact on their life than a TBBS sysop. You can buy 64-user TBBS 2.3 for \$1,995 (32-user \$1,495,

16-user \$895,
4-user \$295)
and use the money
you saved on hardware to celebrate
your success.

Call

303-699-6565

for more information and access to a demonstration system.

eSoft, Incorporated
15200 E. Girard Ave.
Suite 3000
Aurora, CO 80014
303-699-6565

*Picture shows complete 16 user TBBS/TDBS System.

DVORAK ONLINE

THE FUTURE OF COMPUTING

By Dvorak

It was a Disney executive who was telling a Nightly Business News interviewer that TV won't be the same five years from now...it will have some sort of computer in it. "It will have a navigator and when you turn it on it will say hi and ask you want you want to do that day."



You know, "Hi Jack, what do you want to watch today?"

"Uh, I didn't think about it. What's on tonight?"

"Puh-leeze. There are 500 channels and since it's now 9 AM it would take me all day to recite todays shows. Can't you be more specific?"

"We, sheesh. You asked! How about a comedy. Murphy Brown?"

"Murphy Brown is on Monday. Get with the program, dweeb."

"Well, is there anything I normally watch tonight?"

"Not really."

Yeah, this is going to work wonders.

I've been giving some of these futuristic promises some thought and have decided that while there may be a computer in the TV in five years, it won't do much more than change channels, control surround sound and maybe adjust the color in some cool way. As for the rest, forget it.

But that isn't stopping anyone from investing in the odd promises. A fool and his money are soon parted.

Let me tell you a story about Steve Wozniak — the inventor of the Apple II and an inveterate technology booster. After quitting Apple he started a company called Cloud Nine where he tried to market a be-all, end-all TV remote control device that could do just about anything. It was so hard to use that it was basically useless. It died on the retailers shelves. It was an idea that appealed to a rather small number of people. We always have to remember that not everyone likes gizmos.

Wozniak once asked an audience "Wouldn't it be cool if when you were travelling and remembered that you forgot to set your VCR to record a program if you could call your house and program the VCR over the phone." I was sitting in the audience and the fellow sitting next to me mumbled, "I think you're watching too much TV."

Only Woz and a very very few other high tech junkies would actually wire their house with all sorts of gizmoid devices and complicate their lives with this stuff. Most people who have the capability (such as the readers of Boardwatch) don't actually go through the trouble of doing this - EVEN THOUGH THEY CAN. So what about the general public. Once they are introduced to all this wizardry will they actually implement all this futuristic crap? I seriously doubt it. How many people go through the trouble of reading the VCR manual so they can set the clock on the VCR? Only a few people can program the thing. It was a humiliation to the American people when VCR Plus was introduced. Before that Panasonic even tried some bar-code thingamajig for dummies to try. So, based on this, are we supposed to see some sort of convergence of technologies? In the next five years? Who are these boneheads kidding? The home of the future will not be much different than it is today.

VIDEO ON DEMAND

Well, some ask, what about all the video on demand stuff. AT LEAST that will be implemented. Maybe, to a degree it will. But not using multimillion dollar video servers as some have proposed. If you go to a cable show you see the way most video on demand systems work. There is a bank of laser disk players and some poor schlub has to hand load each one as the requests for movies come in. This only works on addressable cable systems, by the way. The problems are obvious. Everyone wants to watch the latest film and Aunt Phyllis, who goes to bed early, already has it started. The cable company, which has no experience in this sort of customer service thing, never has enough copies of anything so nobody but a few people get to see the new film. I hope you all like old movies if you think this is a good idea.

I suppose I could go on and on with this rant, but let me just say that a lot of people are going to waste a lot of money trying to exploit a market that isn't there. I'm reminded of the hoopla that preceded the ridiculous interest in pen-based computing. Anytime you see the phone companies jump on these bandwagons early, you know there is a problem.

ONE BBSCON

I may as well put in my two cents worth about the recent ONE BBSCON, the premier BBS conference. I think this year's show made it clear that not only has the BBS scene come of age and matured before our eyes, but has stabilized into a pretty decent business for a lot of people. When I go around a show like this I think of the people who are looking for a decent business to get involved with and mistakenly attend the NEW AGE 94 CON or the YOU CAN BE RICH CON or the OPPOR-TUNITIES CON or some other CON. The poor saps are shown how they too can make money selling crystals on the Santa Cruz Boardwalk to rubes and suckers. Meanwhile a good BBS serves the public and can be a profitable enterprise. These people need to come to ONE BBSCON.

The big trend this year seemed to be Internet connectivity. The Internet is something we have to reckon with even though it's hyped to death. I was amused how John Quartermain, the author of the Matrix, and an astute Internet observer says there are probably only about 2 million REAL users on the Net. Jack Rickard has always believed that the inflated usage numbers on the Net were because of bogus users; such as counting every single CompuServe user as an Internet user although few ever use the gateway. Be that as it may, the Internet is still a force to be reckoned with. So where does the BBS community fit in?

Some believe that besides being a gateway to the Internet for mail and maybe newsgroups, BBSs will themselves become newsgroup-like. A Net user in Cambodia can subscribe to the BBS through the Net and access it via a SLIP connection or whatever. The BBS fees would still apply. This means to be a success on the Internet, the BBS would have to have a special purpose. I think the great BBSs of the future will all be of two categories:

- 1) community services,
- 2) highly specialized.

The first — community service — means that it will be a BBS for the town of Aspen. As I write this column I'm in Waikiki (tough life). I would love to be able to access a local BBS that tells me exactly where is this weekends Arts and Crafts Fair that I know is taking place. This type of BBS would be underwritten by the city.

The second would be the BBS for stamp collectors or medical specialists or whatever (even specializing in elaborate chat scenes such as the Garbage Dump BBS). This is where the user pays to join as if it were a club or magazine subscription. The specialty can be as simple as the Exec PC and its desire to archive every known file. I don't know if Mahoney has done this yet, but I suspect the Exec PC will eventually be linked into the World Wide Web as a subscription service and Internet users will enter the Exec PC via their Internet link.

All this means to the BBS operator is a little more work, familiarization with WWW and the ability to link into the Net directly. It's really just another access route and nothing more than that. I've always thought of the Internet as an alternative long distance phone system with no real-time voice capability, although I'm sure there are some voice hacks out there too.

It will be at ONE BBSCON where this future is made most clear. Too bad many of the newcomer goofball "net

surfers" out there who promote the Net haven't got a clue about anything other than the Net itself.

THE BRICK WALL

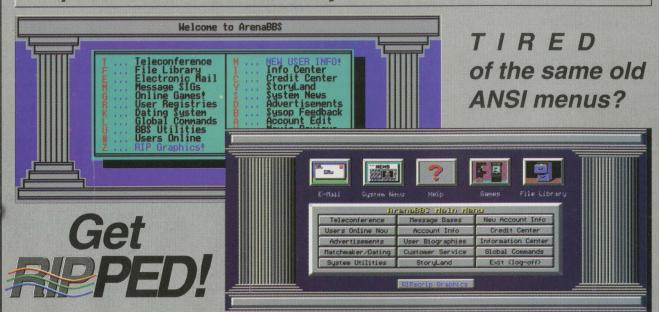
I suppose I should mention one other aspect of telecomputing that I noticed at ONE BBSCON, and I suppose I noticed it elsewhere too. It's that at 28.8 kbps we probably are as close to the brick wall as we're going to get. While I've heard that there may be a mini-jump to 30 kbps and that 40 kbps might be possible under perfect conditions, it seems that 28.8 kbps is going to be our raw speed limit for a good while. Hopefully before 40 kbps is reached (if ever) we'll be using ISDN and beyond. The

ISDN thing is still annoying since it should be 100% implemented today but some systems such as US WEST are more interested in cable TV or other ventures than in improving the allimportant infrastructure of the nation. The sad thing about phonecos such as US WEST is that they care so little about phone service that in areas they serve not only is ISDN not available (anytime soon), but the phone lines themselves are horrible and probably not up to 28.8 kbps capability. I hear this same complaint about phone service in the rural South. I can't emphasize enough the need to complain about phone service and the infrastructure in this country.





Graphical User Interface for your Information Server/BBS



Graphical user interfaces have been available on many different computer systems for years. But until now, you haven't been able to get a bulletin board system with a GUI unless you used a proprietary solution. Until now. RIPscrip (Remote Imaging Protocol script language) is a published specification developed by TeleGrafix supported by over twenty-five leading vendors on the PC, Macintosh, and Unix platforms. Any on-line system that can display a text menu can use RIPscrip. Chances are that your favorite BBS has RIPscrip support built in.



RIP*draw* is the entry level RIP*scrip* graphics creation package. Designed for recreational system operators and the telecommunicator, RIP*draw* is perfect for creation of stunning on-line graphics at a low price – \$\$\times\$. • Special - \$35 •



RIPaint is a graphical drawing environment designed for creating menus and screens to supplement or replace a host's existing menus. Integrated tools for creation of clickable buttons, creation and use of bitmap icons, and optimization of files makes this a powerful tool for creating a graphical user interface for your system at an affordable price – \$200.

RIPscrip Graphics are supported by these bulletin board systems:

The Major BBS (Galacticomm) NovaLink Professional (ResNova) Osiris XLT (Int'l TeleCom) PCBoard (Clark Development) Remote Access (Wantree) Searchlight (Searchlight Software) Synchronet (Digital Dynamics)
TBBS/TDBS (eSoft)
Wildcat! (Mustang Software)



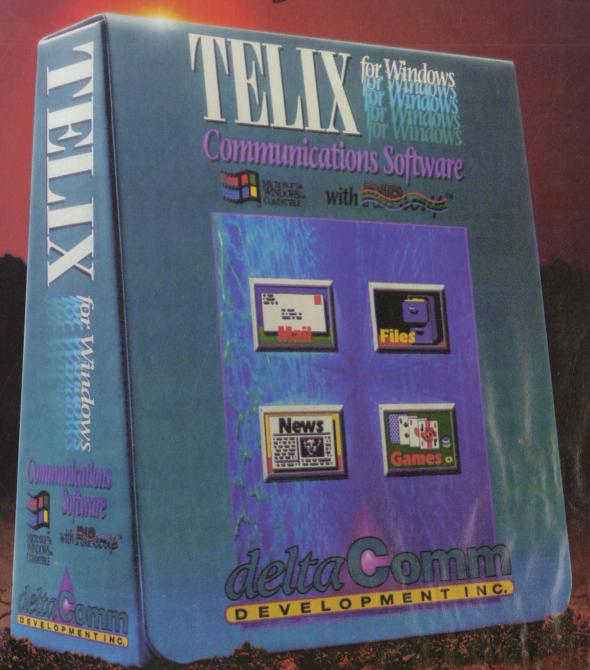
Recipient of the 1993 Dvorak/Zoom Telecommunications Award

for Outstanding Advanced BBS Graphic Standard



COMMUNICATIONS INC. 714/379-2131 Voice • 714/379-2132 Fax 714/379-2133 BBS "Integrating
Multimedia and
Telecommunications
Technologies"™

The Dawn of a New Era...



A New Age In Telecommunications Is Here!

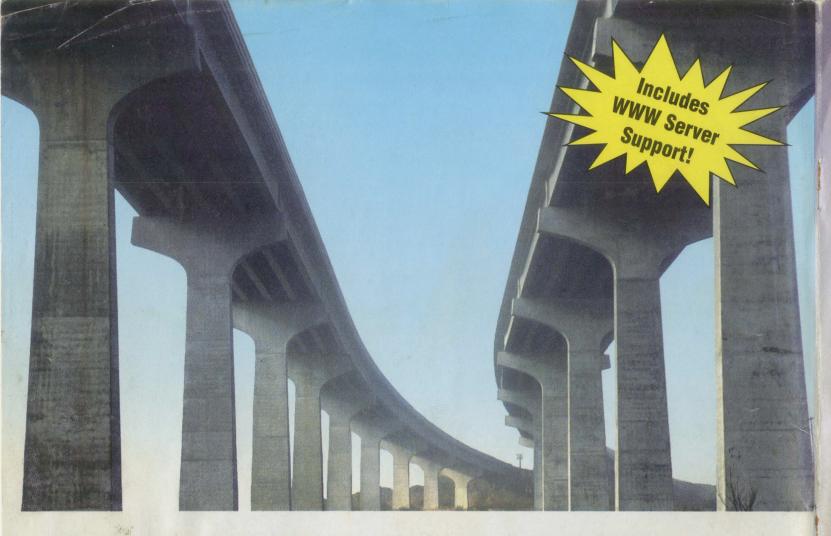
Telix for Windows is the bright new star in graphical communications, sporting a rich feature set that runs rings around the competition and file transfer speeds that approach the speed of light. Graphics, menus and text are integrated with TWO powerful scripting languages in one stellar multimedia package. Built-in **RIP** scripting support turns an ordinary call into a graphical odyssey.

Call today for a free demo, and discover how your system will evolve with Telix for Windows.

Call now: 1-800-859-8000

DEVELOPMENT INC.

PO Box 1185 • Cary, North Carolina 27512



Introducing the only integrated Internet connectivity for a DOS platform BBS.

Now you can launch an interactive service on the Internet without UNIX, without a second computer, without a tangle of serial cables, and without LAN-based "nanny" machines.

Only The Major BBS® and the Internet Connectivity Option™ by Galacticomm give you the freedom to run a multi-user BBS with a built-in TCP/IP stack. You have the power to support up to 64 simultaneous Internet connections and over 100 dial-up users — all on a single Pentium-class machine.

Customers, prospects, and business associates can telnet into your system from anywhere on the Internet. Full ANSI and RIPscrip graphics give them a friendly interface. Airtight password security locks out uninvited guests. And with the open architecture of The Major BBS, you can offer users everything from

photograph databases to online shopping to multiplayer games.

You can also establish yourself as a secured FTP site. Authorized users can remotely "get" and "put" files into subdirectories that mirror the File Libraries of your BBS. Locks and Keys™ access control lets you secure each file area. "Anonymous FTP" is also supported, with an audit trail record of activity. And WWW server support lets clients transparently get graphical HTML pages too.

From your BBS, users can telnet out to sites on the Internet (DNS resolution included). Outgoing FTP client support lets users "get" files from remote servers and automatically tag them for download, or "put" files simply by uploading them. You can create menu choices to favorite Internet sites, restrict access of users to selected remote sites only, and

charge extra (or discount) users when they dial in or out across the Internet.

Best of all, by using the built-in Menu Tree™ and text block editor of The Major BBS, you can customize your entire Internet interface to give your service its own, unique "look and feel."

All you need is a SLIP connection to your favorite Internet provider. Or, for greater bandwidth, you can hook up a direct 56K, fractional T1, or full T1 line using a router that connects your BBS over an Ethernet LAN.

For more information, see your Galacticomm dealer, or give us a call at 1-800-328-1128 (or 305-583-5990 outside the U.S. and Canada). And enjoy total integration to the Internet — the easy way.

GALACTICOMM



If you don't Subscribe...



...you don't know Jack

BOARDWATCH MAGAZINE Subscription Order Form

Save 37% off Cover Price

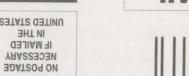
Since March 1987, Boardwatch Magazine has served as the leading monthly publication covering electronic bulletin boards and online information services. Each issue is packed with information on hundreds of specialized low cost BBS systems, Shareware software releases, information databases, successful online services, developments in our nation's telephone system, hardware and software reviews, profiles of PC communications industry players and infopreneurs, and tips on how to get the MOST value from your modem and PC at the least cost. Read the BBS industries' favorite insider's magazine - Boardwatch.

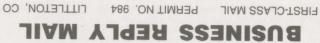
"If you're even remotely interested in the BBS scene, then you have to get a subscription to Jack Rickard's BOARDWATCH...outstanding...a gem of a resource. John C. Dvorak, PC Magazine, Oct 31, 1989 U.S./Canada/Mexico 12 Issues...\$36.00 Name: 24 Issues...\$59.00 Address: **Overseas** City: __ 12 Issues...\$99.00 State: Zip: Check Enclosed Visa/MC Card # Exp: Fax: (303) 973-3731 BBS: (303) 973-4222 Subscriptions: (800) 933-6038



Voice: (303) 973-6038 Fax: (303) 973-3731 BBS: (303) 973-4222 Subscriptions Only

UNITED STATES **3HT NI**





POSTAGE WILL BE PAID BY ADDRESSEE

LITTLETON COLORADO 80127-9929 5970 SOUTH VIVIAN STREET

hilmhilidumhilmhilmhilmmilidull